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This index covers all technical items - papers, correspondence, reviews, etc. - that appeared in this periodical during 1994-1996, and items from previous years that were commented upon or corrected during this period.

The Author Index contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The Subject Index contains several entries for each item under appropriate subject headings, and subject cross-references.

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Einstein, J.R., *see* Ying Xu, *PROC Oct 96* 1544-1552
Ekmecic, I., I. Tartalja, and V. Milutinovic. A survey of heterogeneous computing: concepts and systems; *PROC Aug 96* 1127-1144
Eleftheriades, G. Review of "Dyadic Green Functions in Electromagnetic Theory" (Tai, C.-T.; 1994); *PROC Jun 95* 998-999
El-Jaroudi, A., M.S. Redfern, L.F. Chaparro, and J.M. Furman. The application of time-frequency methods to the analysis of postural sway; *PROC Sep 96* 1312-1318
Ellder, A.J., *see* Brenner, M.J., *PROC May 94* 734-741
Ellder, A.J., *see* Brenner, M.J., *PROC Sep 94* 1467
Elliott, D.L. Review of "Stability Theory" (Parks, P.C., and Hahn, V.; 1993); *PROC May 96* 799-800
Emberson, H., *see* Witten, I.H., *PROC Jun 94* 878-888
Emerson, D.T., *see* Mayer, C.E., *PROC May 94* 756-762
Enge, P., T. Walter, S. Pullen, Changdon Kee, Yi-Chung Chao, and Yeou-Jyh Tsai. Wide area augmentation of the Global Positioning System; *PROC Aug 96* 1063-1088
Enome, S., *see* Nakajima, H., *PROC May 94* 705-713
Enz, C.C., and G.C. Temes. Circuit techniques for reducing the effects of op-amp imperfections: Autozeroing, correlated double sampling, and chopper stabilization; *PROC Nov 96* 1584-1614
Ephremides, A. Review of "The Collected Papers of Claude E. Shannon" (Sloane, N.J.A., and Wyner, A.D., Eds.; 1993); *PROC Oct 96* 1570-1571
Ersoy, O.K. A comparative review of real and complex Fourier-related transforms; *PROC Mar 94* 429-447
Esch, J. Prolog to "Control of molecular motion"; *PROC Jan 96* 6
Esch, J. Prolog to "Performance trends in high-end processors"; *PROC Jan 95* 18-19
Esch, J. Prolog to "Managing design data: The five dimensions of CAD frameworks, configuration management and product data management"; *PROC Jan 96* 40-41
Esch, J. Prolog to "Applications of voice processing to telecommunications"; *PROC Feb 94* 197-198
Esch, J. Prolog to "Design methodology management"; *PROC Feb 94* 229-230
Esch, J. Prolog to "Human and machine recognition of faces: A survey"; *PROC May 95* 704
Esch, J. Prolog to "Active and nonlinear wave propagation devices in ultrafast electronics and optoelectronics"; *PROC Jul 94* 1035-1036
Esch, J. Prolog to "Principles and methods of testing finite state machines - A survey"; *PROC Aug 96* 1089
Esch, J. Prolog to "Autonomous vehicles"; *PROC Aug 96* 1145-1146
Esch, J. Prolog to "Service disciplines for guaranteed performance service in packet-switching networks"; *PROC Oct 95* 1373
Esch, J. Prolog to "The first compact blue/green diode lasers - Wide-bandgap II-VI semiconductors come of age"; *PROC Oct 94* 1501-1502
Esch, J. Prolog to "Environment representation using multiple abstraction levels"; *PROC Nov 96* 1682-1683
Esch, J. Prologs to "Quantum information processing: Cryptography, computation, and teleportation"; *PROC Dec 96* 1717-1718
Esener, S.C., *see* Yayla, G., *PROC Nov 94* 1749-1762
Eto, Y., *see* Umemoto, M., *PROC Jul 95* 1044-1054
Everitt, D.E. Traffic engineering of the radio interface for cellular mobile networks; *PROC Sep 94* 1371-1382
Ezawa, Y., *see* Schwartz, D.G., *PROC Apr 94* 482-498

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Falk, H. Prolog to "Detection of signals in chaos"; *PROC Jan 95* 94
Falk, H. Prolog to "Neural networks for statistical recognition of continuous speech"; *PROC May 95* 741
Falk, H. Prolog to "Discrete simulation of colored noise and stochastic processes and $1/f^{alpha}$ power law noise generation"; *PROC May 95* 800-801
Falk, H. Prolog to "Vacuum microelectronic devices"; *PROC Jul 94* 1005
Falk, H. Prolog to "Detection of non-Gaussian signals: A paradigm for modern statistical signal processing"; *PROC Jul 94* 1060

Falk, H. Prolog to "A survey of heterogeneous computing: Concepts and Systems"; *PROC Aug 96* 1124-1126
Falk, H. Prolog to "Reengineering the curriculum: Design and analysis of a new undergraduate electrical and computer engineering degree at Carnegie Mellon University"; *PROC Sep 95* 1244-1245
Falk, H. Prolog to "Protocol pruning"; *PROC Oct 95* 1356
Falk, H. Prolog to "Recent advances in theory and applications of scrambling techniques for lightwave transmission"; *PROC Oct 95* 1397-1398
Falk, H. Prolog to "Speech coding: A tutorial review"; *PROC Oct 94* 1539-1540
Falk, H. Prolog to "Knowledge-directed vision: Control, learning, and integration"; *PROC Nov 96* 1623-1624
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Farge, M., N. Kevlahan, V. Perrier, and E. Goirand. Wavelets and turbulence; *PROC Apr 96* 639-669
Farr, T.G., *see* Zebker, H.A., *PROC Dec 94* 1774-1786
Faybusovich, L. Review of "Optimization and Dynamical Systems" (Helmke, U., and Moore, J.; 1994); *PROC Jun 96* 907-908
Feldkamp, L.A. Review of "Neural Networks: Current Applications" (Lisboa, P.G.J., Ed.; 1992); *PROC Jan 96* 87-88
Feldkamp, L.A., *see* Puskorius, G.V., *PROC Oct 96* 1407-1420
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Fischl, R.F., *see* Kwatny, H.G., *PROC Nov 95* 1456-1483
Fitzsimmons, E.A., and J.D. Fletcher. Beyond DoD: non-defense training and education applications of DIS; *PROC Aug 95* 1179-1187
Flamant, P.H., *see* Vaughan, J.M., *PROC Feb 96* 205-226
Flanagan, J.L. Technologies for multimedia communications; *PROC Apr 94* 590-603
Fletcher, J.D., *see* Fitzsimmons, E.A., *PROC Aug 95* 1179-1187
Fogel, D.B. Review of "Review of Computatational Intelligence Imitating Life" (Zurada, J.M., et al., Eds.; 1994); *PROC Nov 95* 1588-1591
Foley, J.E. Environmental characterization with magnetics and STOLS; *PROC Dec 94* 1823-1834
Franco, M.M., *see* Otoshi, T.Y., *PROC May 94* 788-795
Freed, C., *see* Melngailis, I., *PROC Feb 96* 227-267
Frehlich, R.G., *see* Coles, W.A., *PROC May 94* 697-704
Freuhauf, K. Review of "Software Quality Management - A Pro-active Approach" (Brinkworth, J.W.O.; 1992); *PROC Mar 95* 488-489
Friedman, L.J., *see* McManamon, P.F., *PROC Feb 96* 268-298
Frush, C.L., *see* Wurman, J., *PROC Dec 94* 1861-1872
Frush, C.L., *see* Hildebrand, P.H., *PROC Dec 94* 1873-1890
Fuhrmann, W.F., and V. Brass. Performance aspects of the GSM radio subsystem; *PROC Sep 94* 1449-1466
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Garrett, R., *see* Reddy, R., *PROC Aug 95* 1188-1195
Garth, L.M., and H.V. Poor. Detection of non-Gaussian signals: a paradigm for modern statistical signal processing; *PROC Jul 94* 1061-1095
Gaumond, C.F., *see* Dragonette, L.R., *PROC Sep 96* 1249-1263
Gaunaurd, G.C., and H.C. Strifors. Signal analysis by means of time-frequency (Wigner-type) distributions-applications to sonar and radar echoes; *PROC Sep 96* 1231-1248
Gautier, E., *see* Colaitis, M.-J., *PROC Jul 96* 1019-1037
Gaynor, G.H. Review of "Strategic Technology Management" (Betz, F.; 1993); *PROC Mar 96* 500-501
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Gehrke, W., *see* Pirsch, P., *PROC Feb 95* 220-246
Geist, R.M., *see* Tomek, L., *PROC Jan 94* 108-121
Gelenbe, E., and J. Barhen. Scanning the issue: Special issue on engineering applications of artificial neural networks [intro.]; *PROC Oct 96* 1355-1357
Gelenbe, E., Yutao Feng, and K.R.R. Krishnan. Neural network methods for volumetric magnetic resonance imaging of the human brain; *PROC Oct 96* 1488-1496
Gelenbe, E., *see* Cramer, C., *PROC Oct 96* 1529-1543
Gerber, R., *see* Lee, I., *PROC Jan 94* 158-171
Gersho, A. Advances in speech and audio compression; *PROC Jun 94* 900-918
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Giannetti, F., *see* De Gaudenzi, R., *PROC Jan 96* 18-39
Gielen, G., P. Wambacq, and W.M. Sansen. Symbolic analysis methods and applications for analog circuits: a tutorial overview; *PROC Feb 94* 287-304
Gi Lee Byeong, *see* Byeong Gi Lee, *PROC Oct 95* 1399-1428
Giles, R., and Tingye Li. Optical amplifiers transform long-distance lightwave telecommunications; *PROC Jun 96* 870-883
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Gorog, I. Displays for HDTV: direct-view CRT's and projection systems; *PROC Apr 94* 520-536
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Griffis, A.J., *see* Le Vine, D.M., *PROC Dec 94* 1787-1801
Griffis, P.D., and S.J. Lipoff. At the crossroads of the information highway: new technology directions in consumer electronics; *PROC Apr 94* 459-464
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Guillemain, P., and R. Kronland-Martinet. Characterization of acoustic signals through continuous linear time-frequency representations; *PROC Apr 96* 561-585
Guiney, M., *see* Kleinfeldt, S., *PROC Feb 94* 231-250
Gunshor, R.L., and A.V. Nurmikko. The first compact blue/green diode lasers-wide-bandgap II-VI semiconductors come of age; *PROC Oct 94* 1503-1513
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Habara, K., *see* Ohzu, H., *PROC May 96* 782-798
Habib, I.W. Applications of neurocomputing in traffic management of ATM networks; *PROC Oct 96* 1430-1441
Hager, G. Review of "Active Vision" (Blake, A., and Yuille, A.; 1992); *PROC Mar 95* 484
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Hai-Wen Chen Modeling and identification of parallel nonlinear systems: structural classification and parameter estimation methods; *PROC Jan 95* 39-66
Halici, U., and G. Ongun. Fingerprint classification through self-organizing feature maps modified to treat uncertainties; *PROC Oct 96* 1497-1512
Hammerstrom, D.W., and D.P. Lulich. Image processing using one-dimensional processor arrays; *PROC Jul 96* 1005-1018
Hanaoka, Y., *see* Nakajima, H., *PROC May 94* 705-713
Haney, M.W. Compact acousto-optic processor for synthetic aperture radar image formation; *PROC Nov 94* 1735-1748
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Hanson, A.R., *see* Draper, B.A., *PROC Nov 96* 1625-1637
Harashima, F. Power electronics and motion control-a future perspective; *PROC Aug 94* 1107-1111
Hardesty, R.M., *see* Huffaker, R.M., *PROC Feb 96* 181-204
Harper, A. Review of "Concurrent Engineering Design" (Miller, L.G.; 1994); *PROC Mar 95* 485-486
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Harris, E.P., S.W. Depp, W.E. Pence, S. Kirkpatrick, M. Sri-Jayantha, and R.R. Troutman. Technology directions for portable computers; *PROC Apr 95* 636-658
Hashimoto, Y., M. Yamamoto, and T. Asaida. Cameras and display systems; *PROC Jul 95* 1032-1043
Hauck, S. Asynchronous design methodologies: an overview; *PROC Jan 95* 69-93
Hayashi, T., T. Nishimura, T. Takano, S.-I. Betsudan, and S. Koshizaka. Japanese deep-space station with 64-m-diameter antenna fed through beam waveguides and its mission applications; *PROC May 94* 646-657
Hayes, D.F. Review of "LAN Communications Handbook" (Simonds, F.; 1994); *PROC Sep 95* 1296-1297
Haykin, S., and Xiao Bo Li. Detection of signals in chaos; *PROC Jan 95* 95-122
Haykin, S., *see* Dony, R.D., *PROC Feb 95* 288-303

Haykin, S., R.J. Racine, Yan Xu, and C.A. Chapman. Monitoring neuronal oscillations and signal transmission between cortical regions using time-frequency analysis of electroencephalographic activity; *PROC Sep 96* 1295-1301
Hein, H., *see* Baars, J.W.M., *PROC May 94* 687-696
Henriquez, C.S., and A.A. Papazoglou. Using computer models to understand the roles of tissue structure and membrane dynamics in arrhythmogenesis; *PROC Mar 96* 334-354
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Herley, C., *see* Ramchandran, K., *PROC Apr 96* 541-560
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Heydt, G.T., *see* Olejniczak, K.J., *PROC Mar 94* 372-380
Hildebrand, P.H., C.A. Walther, C.L. Frush, J. Testud, and F. Baudin. The ELDORA/ASTRAIA airborne Doppler weather radar: goals, design, and first field tests; *PROC Dec 94* 1873-1890
Hill, D.J. Scanning the issue: special issue on nonlinear phenomena in power systems: theory and practical implications [intro.]; *PROC Nov 95* 1439-1441
Hinton, H.S., T.J. Cloonan, F.B. McCormick, Jr., A.L. Lentine, and F.A.P. Tooley. Free-space digital optical systems; *PROC Nov 94* 1632-1649
Hiskens, I.A. Analysis tools for power systems-contending with nonlinearities; *PROC Nov 95* 1573-1587
Hoang Le-Huy Microprocessors and digital ICs for motion control; *PROC Aug 94* 1140-1163
Hobbs, D.S., *see* McManamon, P.F., *PROC Feb 96* 268-298
Hofer, R.C., and M.L. Loper. DIS today [Distributed interactive simulation]; *PROC Aug 95* 1124-1137
Hofmann, J. Networking consumer products in the home; *PROC Apr 94* 615-622
Holloway, C.L., *see* Wurman, J., *PROC Dec 94* 1861-1872
Holtz, J. Pulsewidth modulation for electronic power conversion; *PROC Aug 94* 1194-1214
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Honcharenko, W., *see* Bertoni, H.L., *PROC Sep 94* 1333-1359
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Hoogendoorn, A. Digital compact cassette; *PROC Oct 94* 1479-1489
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Hopkins, R. Choosing an American digital HDTV terrestrial broadcasting system; *PROC Apr 94* 554-563
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Howard, P.G., and J.S. Vitter. Arithmetic coding for data compression; *PROC Jun 94* 857-865
Hsiao-Dong Chang, Chia-Chi Chu, and G. Cauley. Direct stability analysis of electric power systems using energy functions: theory, applications, and perspective; *PROC Nov 95* 1497-1529
Hsien Wu Ming, *see* Ting-Chung Poon, *PROC May 96* 753-764
Hsing, T.R., *see* Lin, D.W., *PROC Feb 95* 175-193
Huang, C. Review of "Satellite Communication Systems Engineering, 2nd edn." (Pritchard, W.L., et al.; 1993); *PROC Mar 94* 448-449
Huang, H., *see* Yatagai, T., *PROC Jun 96* 828-852
Huang, H.K., *see* Wong, S., *PROC Feb 95* 194-219
Huang, K.S. Review of "Optical Signal Processing" (VanderLugt, A.; 1992); *PROC May 94* 824
Huang, T.S., and A.N. Netravali. Motion and structure from feature correspondences: a review; *PROC Feb 94* 252-268
Huang, T.S., *see* Aizawa, K., *PROC Feb 95* 259-271
Huang Kung-Shiuh, *see* Kung-Shiuh Huang, *PROC Nov 94* 1711-1723
Huffaker, R.M., and R.M. Hardesty. Remote sensing of atmospheric wind velocities using solid-state and CO_2 coherent laser systems; *PROC Feb 96* 181-204
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Hui Zhang Service disciplines for guaranteed performance service in packet-switching networks; *PROC Oct 95* 1374-1396
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Hwang, J.-N. Review of "Neural Networks: A Comprehensive Foundation" (Haykin, S.; 1994); *PROC Sep 95* 1294-1296
Hwu, W.W., R.E. Hank, D.M. Gallagher, S.A. Mahlke, D.M. Lavery, G.E. Haab, J.C. Gyllenhaal, and D.I. August. Compiler technology for future microprocessors; *PROC Dec 95* 1625-1640

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Ichioka, Y., T. Iwaki, and K. Matsuoka. Optical information processing and beyond; *PROC May 96* 694-719
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Ideker, R.E., and R.C. Barr. Scanning the issue: Special issue on electrical therapy of cardiac arrhythmias [intro.]; *PROC Mar 96* 331-333
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Ingalls, R.P., J. Antebi, J.A. Ball, R. Barvainis, J.F. Cannon, J.C. Carter, P.J. Charpentier, B.E. Corey, J.W. Crowley, K.A. Dudevoir, M.J. Gregory, F.W. Kan, S.M. Milner, A.E.E. Rogers, J.E. Salah, and M.S. Zarghamee. Upgrading the Haystack radio telescope for operation at 115 GHz; *PROC May 94* 742-755
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Irimajiri, Y., *see* Nakajima, H., *PROC May 94* 705-713
Isono, H., *see* Motoki, T., *PROC Jul 95* 1009-1021
Itoh, K., K. Sasaki, and Y. Nakagome. Trends in low-power RAM circuit technologies; *PROC Apr 95* 524-543
Iwai, T., and T. Asakura. Speckle reduction in coherent information processing; *PROC May 96* 765-781
Iwai, Z. Review of "Direct Adaptive Control Algorithms: Theory and Applications" (Kaufman, H., et al.; 1994); *PROC May 96* 800-801
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Jabbari, B. Scanning the issue: Special issue on wireless netowrks for mobile and personal communications [special issue intro.]; *PROC Sep 94* 1331-1332
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Jahns, J. Planar packaging of free-space optical interconnections; *PROC Nov 94* 1623-1631
Jahns, T.M. Motion control with permanent-magnet AC machines; *PROC Aug 94* 1241-1252
Jang, J.-S.R., and Chuen-Tsai Sun. Neuro-fuzzy modeling and control; *PROC Mar 95* 378-406
Jaworski, R.V., *see* Warren, J.A., *PROC Mar 96* 468-479
Jelalian, A.V. Scanning the issue: Special issue on laser radar [intro.]; *PROC Feb 96* 99-102
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Jenkins, J.M., and S.A. Caswell. Detection algorithms in implantable cardioverter defibrillators; *PROC Mar 96* 428-445
Jensen, M.A., and Y. Rahmat-Samii. EM interaction of handset antennas and a human in personal communications; *PROC Jan 95* 7-17
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Jimma, K.M., *see* Vu, K.T., *PROC Nov 95* 1442-1455
Johnson, G.E. Constructions of particular random processes; *PROC Feb 94* 270-285
Jones, J.L., and O.H. Tovar. The mechanism of defibrillation and cardioversion; *PROC Mar 96* 392-403
Jordan, H.F., and M.J. Murdocca. Scanning the issue: Special issue on optical computing systems; *PROC Nov 94* 1591-1594
Jordan, H.F., V.P. Heuring, and R. Feuerstein. Optoelectronic time-of-flight design and the demonstration of an all-optical, stored program, digital computer; *PROC Nov 94* 1678-1689
Juang Biing-Hwang, *see* Pitton, J.W., *PROC Sep 96* 1199-1215
Jumpertz, J.-L., *see* Colaitis, M.-J., *PROC Jul 96* 1019-1037
Jutamulia, S., and J. Tsujiuchi. Scanning the issue: Special issue on optical information processing [intro.]; *PROC May 96* 691-693
Jutamulia, S., and J. Tsujiuchi. Scanning the issue: Special issue on optical information processing, part 2: Applications - Nonimage signal processing [intro.]; *PROC Jun 96* 811-813

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Kadambe, S. Review of "Visual Representations of Speech Signals" (Cooke, M., et al., Eds.; 1993); *PROC Aug 94* 1324-1325
Kai, K., *see* Nakajima, H., *PROC May 94* 705-713
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Kamen, E.W. Review of "Applied Optimal Control and Estimation" (Lewis, F.L.; 1992); *PROC Nov 94* 1764-1765
Kan, F.W., *see* Ingalls, R.P., *PROC May 94* 742-755
Kaneko, M., K. Aratani, A. Fukumoto, and S. Miyaoka. IRISTER - magneto-optical disk for magnetically induced SuperResolution; *PROC Apr 94* 544-553
Kangas, J., *see* Kohonen, T., *PROC Oct 96* 1358-1384
Karim, M.A., and A.A.S. Awwal. Electrooptic displays for optical information processing; *PROC Jun 96* 814-827
Kasdin, N.J. Discrete simulation of colored noise and stochastic processes and $1/f^{\alpha}$ power law noise generation; *PROC May 95* 802-827
Katsaggelos, A.K., *see* Ozcelik, T., *PROC Feb 95* 304-316

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Khosla, P.K., *see* Director, S.W., *PROC Sep 95* 1246-1269
Kildal, P.-S., L.A. Baker, and T. Hagfors. The Arecibo upgrading: electrical design and expected performance of the dual-reflector feed system; *PROC May 94* 714-724
Kim, Y., and P.H. Schimpf. Electrical behavior of defibrillation and pacing electrodes; *PROC Mar 96* 446-456
Kim Seok Chang, *see* Byeong Gi Lee, *PROC Oct 95* 1399-1428
Kirkpatrick, S., *see* Harris, E.P., *PROC Apr 95* 636-658
Klastorin, T.D. Review of "Project Management: Engineering, Technology, and Implementation" (Shtub, A., etal.; 1994); *PROC Dec 95* 1513
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Kleinfeldt, S., M. Guiney, J.K. Miller, and M. Barnes. Design methodology management; *PROC Feb 94* 231-250
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Knisley, S.B., and W.H. Smith. Experimental techniques for investigating cardiac electrical activity and response to electrical stimuli; *PROC Mar 96* 417-427
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Kohonen, T., E. Oja, O. Simula, A. Visa, and J. Kangas. Engineering applications of the self-organizing map; *PROC Oct 96* 1358-1384
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Kovac, M., and N. Ranganathan. JAGUAR: a fully pipelined VLSI architecture for JPEG image compression standard; *PROC Feb 95* 247-258
Kovacevic, J., and I. Daubechies. Scanning the issue: Special issue on wavelets [intro.]; *PROC Apr 96* 507-509
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Kressel, H., and B.J. Lechner. Scanning the issue: special issue on consumer electronics; *PROC Apr 94* 455-458
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Kroon, P. Review of "Voice Processing" (Pelton, G.E.; 1993); *PROC Nov 94* 1763
Kruschke, J.K. Review of "Connectionism and Psychology" (Quinlan, P.; 1991); *PROC Oct 95* 1431-1432
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Kubota, Y., Y. Nishi, K. Shintani, T. Urabe, K. Shimada, and T. Katsumoto. Latest advances in camcorder technology; *PROC Apr 94* 537-543
Kuchta, D.M. Review of "Computational Methods for Electromagnetics and Microwaves" (Booton, R.C.; 1992); *PROC Jan 95* 123-124
Kung-Shiuh Huang, C.B. Kuznia, B.K. Jenkins, and A.A. Sawchuk. Parallel architectures for digital optical cellular image processing; *PROC Nov 94* 1711-1723
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Kurzweil, J. Review of "Data Communications Principles" (Gitlin, R.O., et al.; 1992); *PROC Apr 94* 623-624
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Kwark, Y.H. Review of "Hot-Carrier Reliability of MOS VLSI Circuits" (Leblebici, Y., and Kang, S.-M.; 1993); *PROC Mar 95* 486-487
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Kwong, W.A., K.M. Passino, E.G. Laukonen, and S. Yurkovich. Expert supervision of fuzzy learning systems for fault tolerant aircraft control; *PROC Mar 95* 466-483

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Lala, J.H., and R.E. Harper. Architectural principles for safety-critical real-time applications; *PROC Jan 94* 25-40
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Lee, E.A., and T.M. Parks. Dataflow process networks; *PROC May 95* 773-801
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Le Vine, D.M., A.J. Griffis, C.T. Swift, and T.J. Jackson. ESTAR: a synthetic aperture microwave radiometer for remote sensing applications; *PROC Dec 94* 1787-1801
Levine, M.D. Scanning the issue [including intro. to special section on signals and systems]; *PROC Nov 96* 1579-1580
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Li, C.-S. Review of "Asynchronous Transfer Mode Solution for Broadband ISBN, 2nd edn." (De Prycker, M.; 1993); *PROC Mar 95* 487-488
Li, C.-S. Review of "Performance Evaluation of High-Speed Switching Fabrics and Networks" (Robertazzi, T.G., Ed.; 1993); *PROC May 94* 824-825
Li, C.-S. Review of "Broadband Telecommunications Technology" (Lee, B.G., et al.; 1993); *PROC Jun 94* 956
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Likourezos, G. Prolog to "Motion and structure from feature correspondences: A review"; *PROC Feb 94* 251
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Lin, D.W., C.-T. Chen, and T.R. Hsing. Video on phone lines: technology and applications; *PROC Feb 95* 175-193
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Maciejewski, A.A. Review of "Robotics and Remote Systems for Hazardous Environments" (Jamshidi, M., and Eicker, P., Eds.; 1993); *PROC Feb 95* 336-337
Macq, B.M., and J.-J. Quisquater. Cryptology for digital TV broadcasting; *PROC Jun 95* 944-957
Magill, D.T., F.D. Natali, and G.P. Edwards. Spread-spectrum technology for commercial applications; *PROC Apr 94* 572-584
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Mansour, M. Review of "Robust Control: Systems with Uncertain Physical Parameters" (Ackermann, J., et al.; 1993); *PROC Oct 96* 1572
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Mayer, C.E., D.T. Emerson, and J.H. Davis. Design and implementation of an error-compensating subreflector for the NRAO 12-m radio telescope; *PROC May 94* 756-762
Mazor, S. The history of the microcomputer-invention and evolution; *PROC Dec 95* 1601-1608
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McLaughlin, D.J., *see* Carswell, J.R., *PROC Dec 94* 1835-1860
McMahan, S.C., M. Bluhm, and R.A. Garibay, Jr. 6×86: the Cyrix solution to executing ×86 binaries on a high performance microprocessor; *PROC Dec 95* 1664-1672
McManamon, P.F., T.A. Dorschner, D.L. Corkum, L.J. Friedman, D.S. Hobbs, M. Holz, S. Liberman, H.Q. Nguyen, D.P. Resler, R.C. Sharp, and E.A. Watson. Optical phased array technology; *PROC Feb 96* 268-298
McRury, I.D., and D.E. Haines. Ablation for the treatment of arrhythmias; *PROC Mar 96* 404-416
Mead, J.B., A.L. Pazmany, S.M. Sekelsky, and R.E. McIntosh. Millimeter-wave radars for remotely sensing clouds and precipitation; *PROC Dec 94* 1891-1906
Meerkov, S.M. Review of "Manufacturing Systems Engineering" (Gershwin, S.B.; 1994); *PROC Jul 96* 1051-1052
Meindl, J.D. Low power microelectronics: retrospect and prospect; *PROC Apr 95* 619-635
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Melngailis, I., W.E. Keicher, C. Freed, S. Marcus, B.E. Edwards, A. Sanchez, Tso Yee Fan, and D.L. Spears. Laser radar component technology; *PROC Feb 96* 227-267
Mendel, J.M. Fuzzy logic systems for engineering: a tutorial; *PROC Mar 95* 345-377
Mendel, J.M. Correction to "Fuzzy logic systems for engineering: A tutorial" (Mar 95 345-377); *PROC Sep 95* 1293
Meng, T.H., B.M. Gordon, E.K. Tsern, and A.C. Hung. Portable video-on-demand in wireless communication; *PROC Apr 95* 659-680
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Mikolajczak, B. Review of "Parallel Logic Programming" (Takeuchi, A.; 1992); *PROC Mar 95* 488
Millane, R.P. Analytic properties of the Hartley transform and their implications; *PROC Mar 94* 413-428
Miller, D.C., and J.A. Thorpe. SIMNET: the advent of simulator networking; *PROC Aug 95* 1114-1123
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Miller, M.D. A scenario for the deployment of interactive multimedia cable television systems in the United States in the 1990s; *PROC Apr 94* 585-589
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Milstein, L.B. Review of "Communication Systems Engineering" (Proakis, and Salehi; 1994); *PROC Mar 95* 486
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Min, P.S. Review of "Telecommunications Network Management into the 21st Century" (Aidarous, S., and Plevyak, T., Eds.; 1994); *PROC Dec 94* 1931
Mindell, D.A. Review of "High Performance; The Culture and Technology of Drag Racing: 1950-1990" (Post, R.C.; 1994); *PROC Aug 95* 1200-1201
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Mingui Sun, Shie Qian, Xiaopu Yan, S.B. Baumann, Xiang-Gen Xia, R.E. Dahl, N.D. Ryan, and R.J. Sclabassi. Localizing functional activity in the brain through time-frequency analysis and synthesis of the EEG; *PROC Sep 96* 1302-1311
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Napier, P.J., D.S. Bagri, B.G. Clark, A.E.E. Rogers, J.D. Romney, A.R. Thompson, and R.C. Walker. The Very Long Baseline Array; *PROC May 94* 658-672
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O'Donnell, R. Prolog to "Circuit techniques for reducing the effects of op-amp imperfections: Autozeroing, correlated double sampling, and chopper stabilization"; *PROC Nov 96* 1582-1583
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Osche, G.R., and D.S. Young. Imaging laser radar in the near and far infrared; *PROC Feb 96* 103-125
Osche, G.R., and D.S. Young. Imaging laser radar in the near and far infrared; *PROC Feb 96* 103-125
Otoshi, T.Y., M.M. Franco, and G.F. Lutes. The fractional frequency stability of a 34-m-diameter beam-waveguide antenna; *PROC May 94* 788-795
Ozcelik, T., J.C. Brailean, and A.K. Katsaggelos. Image and video compression algorithms based on recovery techniques using mean field annealing; *PROC Feb 95* 304-316

P

Pagni, A., *see* Costa, A., *PROC Mar 95* 422-434
Pahlavan, K., and A.H. Levesque. Wireless data communications; *PROC Sep 94* 1398-1430
Pai, M.A., P.W. Sauer, and B.C. Lesieutre. Static and dynamic nonlinear loads and structural stability in power systems; *PROC Nov 95* 1562-1572
Paik, W.H., *see* Challapali, K., *PROC Feb 95* 158-174
Palmer, R.G. Review of "An Introduction to the Modeling of Neural Networks" (Peretto, P.; 1992); *PROC Oct 94* 1583-1584
Pan, Z.G., *see* Yao Li, *PROC Nov 94* 1690-1700
Panagiotidis, N.G., D. Kalogeras, S.D. Kollias, and A. Stafylopatis. Neural network-assisted effective lossy compression of medical images; *PROC Oct 96* 1474-1487
Panariello, G., *see* Bucci, O.M., *PROC Mar 94* 358-371
Papazoglou, A.A., *see* Henriquez, C.S., *PROC Mar 96* 334-354
Parks, T.M., *see* Lee, E.A., *PROC May 95* 773-801
Parrish, A. Millimeter-wave remote sensing of ozone and trace constituents in the stratosphere; *PROC Dec 94* 1915-1929
Paschal, C.B. Review of "Understanding the Nervous System: An Engineering Perspective" (Deutsch, S., and Deutsch, A.; 1993); *PROC Dec 94* 1930
Passino, K.M., *see* Kwong, W.A., *PROC Mar 95* 466-483
Patt, Y. Scanning the issue: Special issue on microprocessors [intro.]; *PROC Dec 95* 1439-1440
Payne, J.M., J.W. Lamb, J.G. Cochran, and N. Bailey. A new generation of SIS receivers for millimeter-wave radio astronomy; *PROC May 94* 811-823
Pazmany, A.L., *see* Mead, J.B., *PROC Dec 94* 1891-1906
Pearson, D.E. Developments in model-based video coding; *PROC Jun 95* 892-906
Pecht, M.G., and F.R. Nash. Predicting the reliability of electronic equipment; *PROC Jul 94* 992-1004
Pedram, M., *see* Singh, D., *PROC Apr 95* 570-594
Peirce, A., *see* Dahleh, M., *PROC Jan 96* 7-15
Pelaez, C.E., *see* Bowles, J.B., *PROC Mar 95* 435-449
Pelosi, G. Scanning the past: The birth of the term "microwaves"; *PROC Feb 96* 326
Penalver, J., *see* Baars, J.W.M., *PROC May 94* 687-696
Pence, W.E., *see* Harris, E.P., *PROC Apr 95* 636-658
Perrier, V., *see* Farge, M., *PROC Apr 96* 639-669
Petajan, E. The HDTV Grand Alliance system; *PROC Jul 95* 1094-1105
Peters, L.P., Jr., J.J. Daniels, and J.D. Young. Ground penetrating radar as a subsurface environmental sensing tool; *PROC Dec 94* 1802-1822
Peterson, L.M., *see* Carmer, D.C., *PROC Feb 96* 299-320
Petty, S.M., *see* Shell, J.S., *PROC May 94* 796-810
Pickard, G.W. Antennae [classic paper reprint]; *PROC Nov 96* 1617-1622
Pickholtz, R.L., *see* Wu, W.W., *PROC Sep 94* 1431-1448
Pielemeier, W.J., G.H. Wakefield, and M.H. Simoni. Time-frequency analysis of musical signals; *PROC Sep 96* 1216-1230
Pinto, J.K. Review of "Managing Innovation and Entrepreneurship in Technology Based Firms" (Martin, M.J.C.; 1994); *PROC Nov 96* 1706-1707
Pinto, J.K. Review of "Technology and Strategy: Conceptual Models and Diagnostics" (Goodman, R.A., and Lawless, M.W.; 1994); *PROC Nov 96* 1707-1708
Pirsch, P., N. Demassieux, and W. Gehrke. VLSI architectures for video compression-a survey; *PROC Feb 95* 220-246
Pitton, J.W., Kuansan Wang, and Biing-Hwang Juang. Time-frequency analysis and auditory modeling for automatic recognition of speech; *PROC Sep 96* 1199-1215
Poon Ting-Chung, *see* Ting-Chung Poon, *PROC May 96* 753-764
Poor, H.V., *see* Garth, L.M., *PROC Jul 94* 1061-1095
Powers, R.A. Batteries for low power electronics; *PROC Apr 95* 687-693
Prasanna, V.K., *see* Cho-Li Wang, *PROC Jul 96* 931-946
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Pullela, R., *see* Rodwell, M.J.W., *PROC Jul 94* 1037-1059
Pullen, J.M., and D.C. Wood. Networking technology and DIS; *PROC Aug 95* 1156-1167
Pullen, S., *see* Enge, P., *PROC Aug 96* 1063-1088
Puskorius, G.V., L.A. Feldkamp, and L.I. Davis, Jr. Dynamic neural network methods applied to on-vehicle idle speed control; *PROC Oct 96* 1407-1420

Pusl, J., *see* Rodwell, M.J.W., *PROC Jul 94* 1037-1059
Putzke, J.J., *see* Warren, J.A., *PROC Mar 96* 468-479

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Rabaey, J.M., *see* Singh, D., *PROC Apr 95* 570-594
Rabiner, L.R. Applications of voice processing to telecommunications; *PROC Feb 94* 199-228
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Racine, R.J., *see* Haykin, S., *PROC Sep 96* 1295-1301
Rafferty, W., S.D. Slobln, C.T. Stelzried, and M.K. Sue. Ground antennas in NASA's deep space telecommunications; *PROC May 94* 636-645
Rahmat-Samii, Y., *see* Jensen, M.A., *PROC Jan 95* 7-17
Rajgopal, S., *see* Singh, D., *PROC Apr 95* 570-594
Rajkumar, R., *see* Lui Sha, *PROC Jan 94* 68-82
Ramakrishna, V., *see* Dahleh, M., *PROC Jan 96* 7-15
Ramamritham, K., and J.A. Stankovic. Scheduling algorithms and operating systems support for real-time systems; *PROC Jan 94* 55-67
Ramanaprasad, V., *see* Srihari, S.N., *PROC Jul 96* 1038-1049
Ramanathan, P., *see* Shin, K.G., *PROC Jan 94* 6-24
Ramchandran, K., M. Vetterli, and C. Herley. Wavelets, subband coding, and best bases; *PROC Apr 96* 541-560
Randall, M., *see* Wurman, J., *PROC Dec 94* 1861-1872
Ranganathan, N., *see* Kovac, M., *PROC Feb 95* 247-258
Rao, N.S.V., and V.A. Protopopescu. On PAC learning of functions with smoothness properties using feedforward sigmoidal networks; *PROC Oct 96* 1562-1569
Rao, S.B., *see* Yao Li, *PROC Nov 94* 1690-1700
Rappaport, S.S., and Lon-Rong Hu. Microcellular communication systems with hierarchical macrocell overlays: traffic performance models and analysis; *PROC Sep 94* 1383-1397
Readhead, A.C.S., *see* Lawrence, C.R., *PROC May 94* 763-767
Reddy, M., *see* Rodwell, M.J.W., *PROC Jul 94* 1037-1059
Reddy, R., and R. Garrett. Future technology challenges in distributed interactive simulation; *PROC Aug 95* 1188-1195
Redfern, M.S., *see* El-Jaroudi, A., *PROC Sep 96* 1312-1318
Redmond, I., *see* Yao Li, *PROC Nov 94* 1690-1700
Reeves, D.S., *see* Aras, C.M., *PROC Jan 94* 122-139
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Riseman, E.M., *see* Draper, B.A., *PROC Nov 96* 1625-1637
Rizvi, S.A., Lin-Cheng Wang, and N.M. Nasrabadi. Neural network architectures for vector prediction; *PROC Oct 96* 1513-1528
Rizzoni, G., *see* Samimy, B., *PROC Sep 96* 1330-1343
Rizzotto, G., *see* Costa, A., *PROC Mar 95* 422-434
Robbins, W.P., *see* Mohan, N., *PROC Aug 94* 1287-1302
Robertazzi, T. Review of "Fundamentals of Telecommunication Networks" (Saadawi, T.N., et al.; 1994); *PROC Aug 95* 1197-1198
Rodwell, M.J.W., S.T. Allen, R.Y. Yu, M.G. Case, U. Bhattacharya, M. Reddy, E. Carman, M. Kamegawa, Y. Konishi, J. Pusl, and R. Pullela. Active and nonlinear wave propagation devices in ultrafast electronics and optoelectronics; *PROC Jul 94* 1037-1059
Rogers, A.E.E., *see* Napier, P.J., *PROC May 94* 658-672
Rogers, A.E.E., *see* Ingalls, R.P., *PROC May 94* 742-755
Rohrer, R.A., *see* Director, S.W., *PROC Sep 95* 1246-1269
Roli, F., S.B. Serpico, and G. Vernazza. A hybrid system for two-dimensional image recognition; *PROC Nov 96* 1659-1681
Romney, J.D., *see* Napier, P.J., *PROC May 94* 658-672
Roth, B.J., and J.P. Wikswo, Jr. The effect of externally applied electrical fields on myocardial tissue; *PROC Mar 96* 379-391
Rue, F., *see* Bijaoui, A., *PROC Apr 96* 670-679
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Sabnani, K.K., *see* Lee, D., *PROC Oct 95* 1357-1372
Sack, E.A. Consumer electronics: an important driver of integrated circuit technology; *PROC Apr 94* 465-468
Sai-Halasz, G.A. Performance trends in high-end processors; *PROC Jan 95* 20-36
Sakr, M.F., *see* Chiarulli, D.M., *PROC Nov 94* 1701-1710
Salah, J.E., *see* Ingalls, R.P., *PROC May 94* 742-755
Salazar, R.P., *see* Zebker, H.A., *PROC Dec 94* 1774-1786
Salembier, P., L. Torres, F. Meyer, and Chuang Gu. Region-based video coding using mathematical morphology; *PROC Jun 95* 843-857
Salon, S. Review of "How to Design a Single Phase Motor on a Personal Computer, 4th edn." (Veinott, C.); *PROC Mar 95* 485
Salvador, A.A., *see* Mohammad, S.N., *PROC Oct 95* 1306-1355
Samimy, B., and G. Rizzoni. Mechanical signature analysis using time-frequency signal processing: application to internal combustion engine knock detection; *PROC Sep 96* 1330-1343
Sanchez, A., *see* Melngailis, I., *PROC Feb 96* 227-267
Sanders, R.S., and M.T. Lee. Implantable pacemakers; *PROC Mar 96* 480-486
Sansen, W.M., *see* Gielen, G., *PROC Feb 94* 287-304
Sarpeshkar, R., J. Kramer, G. Indiveri, and C. Koch. Analog VLSI architectures for motion processing: from fundamental limits to system applications; *PROC Jul 96* 969-987
Sasaki, K., *see* Itoh, K., *PROC Apr 95* 524-543
Sassen, K. Advances in polarization diversity lidar for cloud remote sensing; *PROC Dec 94* 1907-1914
Sathaye, S.S., *see* Lui Sha, *PROC Jan 94* 68-82
Sauer, J.R., *see* Blumenthal, D.J., *PROC Nov 94* 1650-1667
Sauer, P.W., *see* Pai, M.A., *PROC Nov 95* 1562-1572
Sawa, M., *see* Nakajima, H., *PROC May 94* 705-713
Sawchuk, A.A., *see* Kung-Shiuh Huang, *PROC Nov 94* 1711-1723
Schaal, W., *see* Woody, D., *PROC May 94* 673-686
Schafer, R., and T. Sikora. Digital video coding standards and their role in video communications; *PROC Jun 95* 907-924
Schattler, H., *see* Venkatasubramanian, V., *PROC Nov 95* 1530-1561
Schell, W.M., *see* Blahut, D.E., *PROC Jul 95* 1071-1085
Schimpf, P.H., *see* Kim, Y., *PROC Mar 96* 446-456
Schmajuk, N.A. The psychology of robots; *PROC Oct 96* 1553-1561
Schneider, E.G. Radar; *PROC Dec 96* 1775-1827
Schoch, K.F., Jr. Review of "The Wiley Project Engineer's Desk Reference" (Heisler, S.I.; 1994); *PROC Mar 95* 485
Schreiber, W.F. Advanced television systems for terrestrial broadcasting: Some problems and some proposed solutions; *PROC Jun 95* 958-981
Schroder, P. Wavelets in computer graphics; *PROC Apr 96* 615-625
Schroder, P. Corrections to "Wavelets in computer graphics" (Apr 96 615-625); *PROC Aug 96* 1188
Schulzrinne, H., *see* Aras, C.M., *PROC Jan 94* 122-139
Schutten, M.J., *see* Bonissone, P.P., *PROC Mar 95* 450-465
Schwartz, D.G., G.J. Klir, H.W. Lewis, III, and Y. Ezawa. Applications of fuzzy sets and approximate reasoning; *PROC Apr 94* 482-498
Schwoebel, P.R., *see* Brodie, I., *PROC Jul 94* 1006-1034
Sciabassi, R.J., *see* Mingui Sun, *PROC Sep 96* 1302-1311
Sehgal, N., *see* Singh, D., *PROC Apr 95* 570-594
Sekelsky, S.M., *see* Mead, J.B., *PROC Dec 94* 1891-1906
Sekiguchi, H., *see* Nakajima, H., *PROC May 94* 705-713
Self, K. Prolog to "Modeling and identification of parallel nonlinear systems: Structural classification and parameter estimation methods"; *PROC Jan 95* 37-38
Self, K. Prolog to "Performance evaluation of trellis-coded modulation schemes"; *PROC Jun 94* 832
Self, K. Prolog to "Wide area augmentation of the Global Positioning System"; *PROC Aug 96* 1061-1062
Self, K. Prolog to "Emerging gallium nitride base devices"; *PROC Oct 95* 1305
Seok Chang Kim, *see* Byeong Gi Lee, *PROC Oct 95* 1399-1428
Serpico, S.B., *see* Roli, F., *PROC Nov 96* 1659-1681
Shah, M.B., *see* Ying Xu, *PROC Oct 96* 1544-1552
Shahidi, G.G., *see* Davari, B., *PROC Apr 95* 595-606
Sha Lui, *see* Lui Sha, *PROC Jan 94* 68-82
Shams, S. Neural network optimization for multi-target multi-sensor passive tracking; *PROC Oct 96* 1442-1457
Shankar, A.U. Reasoning assertionally about real-time systems; *PROC Jan 94* 172-183
Sharf, I. Review of "Parallel Computation Systems for Robotics Algorithms and Architectures" (Fijany, A., and Bejczy, A., Eds.; 1992); *PROC Aug 95* 1196-1197
Sharp, R.C., *see* McManamon, P.F., *PROC Feb 96* 268-298
Sheinwald, D. On the Ziv-Lempel proof and related topics; *PROC Jun 94* 866-871
Shell, J.S., R.C. Clauss, S.M. Petty, G.W. Glass, M.S. Fiore, J.J. Kovatch, J.R. Loreman, D.E. Neff, R.B. Quinn, and D.L. Trowbridge. Ruby masers for maximum G/T_{op}; *PROC May 94* 796-810
Sheng Yunlong, *see* Yao Li, *PROC May 96* 720-732

Shenoi, B.A. Review of "Handbook for Digital Signal Processing" (Mitra, S.K., and Kaiser, J.F., Eds.; 1993); *PROC Aug 95* 1199-1200
Shibasaki, K., *see* Nakajima, H., *PROC May 94* 705-713
Shie Qian, *see* Mingui Sun, *PROC Sep 96* 1302-1311
Shiflett, J.E., W.H. Lunceford, Jr., and R.P. Willis. Application of distributed interactive simulation technology within the Department of Defense; *PROC Aug 95* 1168-1178
Shih Wei-Kuan, *see* Liu, J.W.S., *PROC Jan 94* 83-94
Shimada, K., *see* Kubota, Y., *PROC Apr 94* 537-543
Shin, K.G., and P. Ramanathan. Real-time computing: a new discipline of computer science and engineering; *PROC Jan 94* 6-24
Shinoda, K., *see* Ting-Chung Poon, *PROC May 96* 753-764
Shinohara, N., *see* Nakajima, H., *PROC May 94* 705-713
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Simoni, M.H., *see* Pielemeier, W.J., *PROC Sep 96* 1216-1230
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Singh, D., J.M. Rabaey, M. Pedram, F. Catthoor, S. Rajgopal, N. Sehgal, and T.J. Mozdzen. Power conscious CAD tools and methodologies: a perspective; *PROC Apr 95* 570-594
Sirohey, S., *see* Chellappa, R., *PROC May 95* 705-741
Slemon, G.R. Electrical machines for variable-frequency drives; *PROC Aug 94* 1123-1139
Slezak, E., *see* Bijaoui, A., *PROC Apr 96* 670-679
Slobin, S.D., *see* Rafferty, W., *PROC May 94* 636-645
Smith, J.E., and G.S. Sohi. The microarchitecture of superscalar processors; *PROC Dec 95* 1609-1624
Smith, W.H., *see* Knisley, S.B., *PROC Mar 96* 417-427
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Sohi, G.S., *see* Smith, J.E., *PROC Dec 95* 1609-1624
Son, S.H., *see* Yu, P.S., *PROC Jan 94* 140-157
Spanias, A.S. Speech coding: a tutorial review; *PROC Oct 94* 1541-1582
Spears, D.L., *see* Melngailis, I., *PROC Feb 96* 227-267
Spiller, T.P. Quantum information processing: Cryptography, computation, and teleportation; *PROC Dec 96* 1719-1746
Spillman, W.B., Jr. Sensing and processing for smart structures; *PROC Jan 96* 68-77
Srihari, S.N., Yong-Chul Shin, V. Ramanaprasad, and Dar-Shyang Lee. A system to read names and addresses on tax forms; *PROC Jul 96* 1038-1049
Sri-Jayantha, M., *see* Harris, E.P., *PROC Apr 95* 636-658
Stafylopatis, A., *see* Panagiotidis, N.G., *PROC Oct 96* 1474-1487
Stankovic, J.A., *see* Ramamritham, K., *PROC Jan 94* 55-67
Stark, L., K. Bowyer, A. Hoover, and D.B. Goldgof. Recognizing object function through reasoning about partial shape descriptions and dynamic physical properties; *PROC Nov 96* 1640-1656
Steinvall, K.O., *see* Vaughan, J.M., *PROC Feb 96* 205-226
Stelzried, C.T., *see* Rafferty, W., *PROC May 94* 636-645
Stelzried, C.T., and M.J. Klein. Precision DSN radiometer systems: impact on microwave calibrations; *PROC May 94* 776-787
Stelzried, C.T., and M.J. Klein. Corrections to "Precision DSN radiometer systems: Impact on microwave calibrations" (May 94 776-787); *PROC Aug 96* 1187
Stemmler, H. High-power industrial drives; *PROC Aug 94* 1266-1286
Stokes, K. Cardiac pacing electrodes; *PROC Mar 96* 457-467
Storer, J.A. Scanning the special section on data compression [special section intro.]; *PROC Jun 94* 856
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Storer, J.A., *see* Carpentieri, B., *PROC Jun 94* 940-947
Stork, J.M.C. Technology leverage for ultra-low power information systems; *PROC Apr 95* 607-618
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Stoyenko, A.D., and T.P. Baker. Real-time schedulability-analyzable mechanisms in Ada9X; *PROC Jan 94* 95-107
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Sun Mingui, *see* Mingui Sun, *PROC Sep 96* 1302-1311
Suri, N., M.M. Hugue, and C.J. Walter. Synchronization issues in real-time systems; *PROC Jan 94* 41-54
Suzuki, Y., *see* Ting-Chung Poon, *PROC May 96* 753-764
Sweldens, W. Wavelets: What next?; *PROC Apr 96* 680-685
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Swift, C.T., *see* Le Vine, D.M., *PROC Dec 94* 1787-1801
Swiniarski, R.W. Review of "Neural Networks for Optimization and Signal Processing" (Cichocki, A., and Unbehauen, R.; 1993); *PROC Jul 95* 1106
Szu, H.H., *see* Yao Li, *PROC May 96* 720-732
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Tacker, W.A., and L.A. Geddes. The laws of electrical stimulation of cardiac tissue; *PROC Mar 96* 355-365
Taiwei Lu, and J. Lerner. Spectroscopy and hybrid neural network analysis; *PROC Jun 96* 895-905
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Tan Chin-Woo, *see* Chin-Woo Tan, *PROC Nov 95* 1484-1496
Tanida, J., T. Konishi, and Y. Ichioka. P-OPALS: pure optical-parallel array logic system; *PROC Nov 94* 1668-1677
Tannas, L.E., Jr. Evolution of flat-panel displays; *PROC Apr 94* 499-509
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Temes, G.C., *see* Enz, C.C., *PROC Nov 96* 1584-1614
Terman, L.M., and R.-H. Yan. Scanning the issue: Special issue on low power electronics [intro.]; *PROC Apr 95* 495-497
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Thomas, D.E., and B. Armstrong-Helouvry. Fuzzy logic control-a taxonomy of demonstrated benefits; *PROC Mar 95* 407-421
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Thum, C., *see* Baars, J.W.M., *PROC May 94* 687-696
Ting-Chung Poon, Ming Hsien Wu, K. Shinoda, and Y. Suzuki. Optical scanning holography; *PROC May 96* 753-764
Ting Wang, *see* Yao Li, *PROC Nov 94* 1690-1700
Tingye Li, *see* Giles, R., *PROC Jun 96* 870-883
Tomek, L., V. Mainkar, R.M. Geist, and K.S. Trivedi. Reliability modeling of life-critical, real-time systems; *PROC Jan 94* 108-121
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Torii, C., *see* Nakajima, H., *PROC May 94* 705-713
Torres, L., *see* Salembier, P., *PROC Jun 95* 843-857
Toumodge, S. Review of "Model Reference Adaptive Control: From Theory to Practice" (Butler, H.; 1992); *PROC Apr 95* 694-695
Toumodge, S. Review of "Stochastic Systems for Engineers: Modelling, Estimation and Control" (Borrie, J.A.; 1992); *PROC Apr 95* 695
Toumodge, S. Review of "The Principles of Self-Support in Control Systems" (Novakovic, Z.R.; 1992); *PROC Apr 95* 696-697
Toumodge, S. Review of "Computer Systems for Automation and Control" (Olsson, G., and Piani, G.; 1992); *PROC Jun 94* 956-957
Toumodge, S. Review of "Transputers in Real-Time Control" (Irvin, G.W., and Fleming, P.J., Eds.; 1992); *PROC Jul 94* 1096
Toumodge, S. Review of "Predictive Control: A Unified Approach" (Soeterboek, R.; 1992); *PROC Aug 95* 1198-1199
Tovar, O.H., *see* Jones, J.L., *PROC Mar 96* 392-403
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corrections to "Precision DSN radiometer systems: impact on microwave calibrations" (May 94 776-787). *Stelzried, C.T., + , PROC Aug 96* 1187
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Bibliographies
Hartley transform, review and bibliog. (special section intro.). *Olejniczak, K.J., + , PROC Mar 94* 372-380
Bifurcation
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Biomedical applications of X-rays; cf. Biomedical X-ray imaging
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lossy compression by neural net. *Panagiotidis, N.G., + , PROC Oct 96* 1474-1487
nuc. med. image restoration by neural net. *Wei Qian, + , PROC Oct 96* 1458-1473
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Bipolar digital integrated circuits
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Block codes
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video/image compression, opt. computing techs. *Yoshida, A., + , PROC Jun 94* 948-954
Block codes; cf. Huffman codes
Book reviews
Active Vision (Blake, A., and Yuille, A.; 1992). *Hager, G., PROC Mar 95* 484
Analog VLSI Implementation of Neural Systems (Mead, C., and Ismail, M., Eds.; 1989). *Andreou, A.G., PROC Oct 95* 1430-1431
An Introduction to Intelligent and Autonomous Control (Antsaklis, P.J., and Passino, K.M., Eds.; 1992). *Walker, I.D., PROC Jun 94* 955
An Introduction to the Modeling of Neural Networks (Peretto, P.; 1992). *Palmer, R.G., PROC Oct 94* 1583-1584
An Introduction to the Physics of High Energy Accelerators (Edwards, D.A., and Syphers, J.J.; 1993). *Weng, W.-T., PROC Mar 94* 448
Applied Optimal Control and Estimation (Lewis, F.L.; 1992). *Kamen, E.W., PROC Nov 94* 1764-1765
Asynchronous Transfer Mode Solution for Broadband ISBN, 2nd edn. (De Prycker, M.; 1993). *Li, C.-S., PROC Mar 95* 487-488
Biped Locomotion, Dynamics, Stability, Control and Application (Vukobratovic, M., et al.; 1990). *Zheng, Y.F., PROC Jan 94* 184-185
Broadband Telecommunications Technology (Lee, B.G., et al.; 1993). *Li, C.-S., PROC Jun 94* 956
Communication Systems Engineering (Proakis, and Salehi; 1994). *Milstein, L.B., PROC Mar 95* 486
Computational Methods for Electromagnetics and Microwaves (Booton, R.C.; 1992). *Kuchta, D.M., PROC Jan 95* 123-124
Computer Systems for Automation and Control (Olsson, G., and Piani, G.; 1992). *Toumodge, S., PROC Jun 94* 956-957
Concurrent Engineering Design (Miller, L.G.; 1994). *Harper, A., PROC Mar 95* 485-486
Connectionism and Psychology (Quinlan, P.; 1991). *Kruschke, J.K., PROC Oct 95* 1431-1432
C++ Programming Style (Cargill, T.; 1992). *Chen, J.-C.J., PROC Apr 94* 623
Cyclostationarity in Communication and Signal Processing (Gardner, W.A., Ed.; 1994). *Cochran, D., PROC Oct 94* 1584-1585
Data Communications Principles (Gitlin, R.O., et al.; 1992). *Kurzweil, J., PROC Apr 94* 623-624
Developing Online Help for Windows (Boggan, S., et al.; 1993). *Barker, T.T., PROC Jun 95* 997-998
Direct Adaptive Control Algorithms: Theory and Applications (Kaufman, H., et al.; 1994). *Iwai, Z., PROC May 96* 800-801
Dyadic Green Functions in Electromagnetic Theory (Tai, C.-T.; 1994). *Eleftheriades, G., PROC Jun 95* 998-999
Engineering Applications of Correlation and Spectral Analysis (Bendat, J.S., and Piersol, A.G.; 1993). *Chen, T.-H., PROC Jan 95* 124
Error Correcting Codes: Theory and Applications (Poli, A., and Hughet, L.; 1992). *Lin, H.-D., PROC Oct 94* 1584
Fiber-Optic Communication Systems (Agrawal, G.P.; 1993). *Willner, A.E., PROC Jul 94* 1096-1097
Fundamentals of Artificial Neural Networks (Hassoun, M.H.; 1995). *Arabshahi, P., PROC Jun 96* 906-907
Fundamentals of Telecommunication Networks (Saadawi, T.N., et al.; 1994). *Robertazzi, T., PROC Aug 95* 1197-1198
Handbook for Digital Signal Processing (Mitra, S.K., and Kaiser, J.F., Eds.; 1993). *Shenoi, B.A., PROC Aug 95* 1199-1200
Heuristic Scheduling Systems with Applications to Production Systems and Project Management (Morton, T.E., and Pentico, D.W.; 1993). *Bard, J.F., PROC Feb 96* 324-325
High Performance; The Culture and Technology of Drag Racing: 1950-1990 (Post, R.C.; 1994). *Mindell, D.A., PROC Aug 95* 1200-1201
Hot-Carrier Reliability of MOS VLSI Circuits (Leblebici, Y., and Kang, S.-M.; 1993). *Kwark, Y.H., PROC Mar 95* 486-487
How to Design a Single Phase Motor on a Personal Computer, 4th edn. (Veinott, C.). *Salon, S., PROC Mar 95* 485
Introduction to the Theory of Neural Computation (Hertz, J., et al.; 1991). *Abu-Mostafa, Y.S., PROC May 96* 799
Kalman Filtering: Theory and Practice (Grewal, M.S., and Andrews, A.P.; 1993). *Bass, R.W., PROC Feb 96* 321-324
LAN Communications Handbook (Simonds, F.; 1994). *Hayes, D.F., PROC Sep 95* 1296-1297
Linear Systems and Signals (Lathi, B.P.; 1992). *Donahue, K.D., PROC Feb 94* 305
Managing Innovation and Entrepreneurship in Technology Based Firms (Martin, M.J.C.; 1994). *Pinto, J.K., PROC Nov 96* 1706-1707
Manufacturing Systems Engineering (Gershwin, S.B.; 1994). *Meerkov, S.M., PROC Jul 96* 1051-1052
Mastering the Dynamics of Innovation: How Companies Can Seize Opportunities in the Face of Technological Change (Utterback, J.M.; 1994). *O'Neill, R.R., PROC Jun 95* 999
Mobile Radio Communication (Steele, R.; 1992). *Ahmadi, H., + , PROC Sep 94* 1468-1469
Model Reference Adaptive Control: From Theory to Practice (Butler, H.; 1992). *Toumodge, S., PROC Apr 95* 694-695
Narrowband Land-Mobile Radio Networks (Linnartz, J.-P.; 1992). *La-Maire, R.O., PROC Apr 95* 695-696
Neural Networks: A Comprehensive Foundation (Haykin, S.; 1994). *Hwang, J.-N., PROC Sep 95* 1294-1296
Neural Networks: Current Applications (Lisboa, P.G.J., Ed; 1992). *Feldkamp, L.A., PROC Jan 96* 87-88
Neural Networks for Optimization and Signal Processing (Cichocki, A., and Unbehauen, R.; 1993). *Swiniarski, R.W., PROC Jul 95* 1106
Neural Networks for Signal Processing (Kosko, B., Ed.; 1992). *Williams, R.J., PROC Oct 95* 1432-1433
Optical Signal Processing (VanderLugt, A.; 1992). *Huang, K.S., PROC May 94* 824
Optimization and Dynamical Systems (Helmke, U., and Moore, J.; 1994). *Faybusovich, L., PROC Jun 96* 907-908
Parallel Computation Systems for Robotics Algorithms and Architectures (Fijany, A., and Bejczy, A., Eds.; 1992). *Sharf, I., PROC Aug 95* 1196-1197
Parallel Logic Programming (Takeuchi, A.; 1992). *Mikolajczak, B., PROC Mar 95* 488
Performance Evaluation of High-Speed Switching Fabrics and Networks (Robertazzi, T.G., Ed.; 1993). *Li, C.-S., PROC May 94* 824-825
Predictive Control: A Unified Approach (Soeterboek, R.; 1992). *Toumodge, S., PROC Aug 95* 1198-1199
Process Control Engineering (Rao, M., and Qui, H.; 1993). *Zhou, M.C., PROC Nov 95* 1592-1593
Project Management: Engineering, Technology, and Implementation (Shtub, A., etal.; 1994). *Klastorin, T.D., PROC Dec 95* 1513
Review of Computatational Intelligence Imitating Life (Zurada, J.M., et al., Eds.; 1994). *Fogel, D.B., PROC Nov 95* 1588-1591
Robotics and Remote Systems for Hazardous Environments (Jamshidi, M., and Eicker, P., Eds.; 1993). *Maciejewski, A.A., PROC Feb 95* 336-337
Robust Control: Systems with Uncertain Physical Parameters (Ackermann, J., et al.; 1993). *Mansour, M., PROC Oct 96* 1572
Satellite Communication Systems Engineering, 2nd edn. (Pritchard, W.L., et al.; 1993). *Huang, C., PROC Mar 94* 448-449
SBus: Information, Applications, and Experience (Lyle, J.D.; 1992). *Zalevsky, J., PROC Apr 95* 694
Software Quality Management - A Pro-active Approach (Brinkworth, J.W.O.; 1992). *Freuhauf, K., PROC Mar 95* 488-489
Stability Theory (Parks, P.C., and Hahn, V.; 1993). *Elliott, D.L., PROC May 96* 799-800

+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

Stochastic Systems for Engineers: Modelling, Estimation and Control (Borrie, J.A.; 1992). *Toumodge, S., PROC Apr 95* 695
Strategic Technology Management (Betz, F.; 1993). *Gaynor, G.H., PROC Mar 96* 500-501
Techniques for Technical Communicators (Barnum, C.M., and Carliner, S., Eds.; 1993). *Brasseur, L.E., PROC Apr 94* 624-625
Technology and Strategy: Conceptual Models and Diagnostics (Goodman, R.A., and Lawless, M.W.; 1994). *Pinto, J.K., PROC Nov 96* 1707-1708
Telecommunications Network Management into the 21st Century (Aidarous, S., and Plevyak, T., Eds.; 1994). *Min, P.S., PROC Dec 94* 1931
The Collected Papers of Claude E. Shannon (Sloane, N.J.A., and Wyner, A.D., Eds.; 1993). *Ephremides, A., PROC Oct 96* 1570-1571
The GSM System for Mobile Communications (Mouly, M., and Pautet, M.-B.). *Chia, S., PROC Jun 95* 999-1000
The Icon Book: Visual Symbols for Computer Systems and Documentation (Horton, W.; 1994). *Winn, D., PROC Oct 95* 1429-1430
The Principles of Self-Support in Control Systems (Novakovic, Z.R.; 1992). *Toumodge, S., PROC Apr 95* 696-697
The Wiley Project Engineer's Desk Reference (Heisler, S.I.; 1994). *Schoch, K.F., Jr., PROC Mar 95* 485
The World in 2020 (McRae, H.; 1994). *Dorf, R.C., PROC Jan 96* 88-89
Transputers in Real-Time Control (Irvin, G.W., and Fleming, P.J., Eds.; 1992). *Toumodge, S., PROC Jul 94* 1096
Understanding the Nervous System: An Engineering Perspective (Deutsch, S., and Deutsch, A.; 1993). *Paschal, C.B., PROC Dec 94* 1930
Universal Compression and Retrieval (Krichevsky, R.; 1994). *Csiszar, I., PROC Jun 95* 1000-1002
Using Formal Description Techniques - An Introduction to ESTELLE, LOTOS, and SDL (Turner, K.J., Ed.; 1993). *Tsai, T.-C., PROC Nov 94* 1763-1764
Virtual Reality Technology (Burdea, G., and Coiffet, P; 1994). *Akay, M., PROC Sep 95* 1294
Visual Representation of Speech Signals (Cooke, M., et al., Eds.; 1993). *Yao, J.-H., PROC Sep 94* 1469
Visual Representations of Speech Signals (Cooke, M., et al., Eds.; 1993). *Kadambe, S., PROC Aug 94* 1324-1325
Voice Processing (Pelton, G.E.; 1993). *Kroon, P., PROC Nov 94* 1763
World Class (Kanter, R.M.; 1995). *Dorf, R.C., PROC Jul 96* 1050-1051

Boundary element methods
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Cardiovascular system prostheses/orthoses; cf. Cardiac pacemakers; Defibrillators

Careers; cf. Engineering profession

Carrier processes; cf. Charge carrier processes

CCITT
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Channel bank filters
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Character recognition; cf. Optical character recognition
Charge carrier processes
book review; Hot-Carrier Reliability of MOS VLSI Circuits (Leblebici, Y., and Kang, S.-M.; 1993). *Kwark, Y.H., PROC Mar 95* 486-487
Charge coupled image sensors
camcorder technol., develops. *Kubota, Y., + , PROC Apr 94* 537-543
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compact acousto-optic proc. for SAR image form. *Haney, M.W., PROC Nov 94* 1735-1748
Chemical transducers
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Chemistry
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Chemistry; cf. Laser chemistry applications
Choppers
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Circuit analysis
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Circuit design; cf. Circuit synthesis; Logic design
Circuit modeling; cf. Integrated circuit modeling
Circuit noise
low-noise analog cct. design fund. *Leach, W.M., Jr., PROC Oct 94* 1515-1538
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Circuit optimization
digital CMOS ccts., power consumption minimization. *Chandrakasan, A.P., + , PROC Apr 95* 498-523
Circuit reliability
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Circuit reliability; cf. Integrated circuit reliability
Circuits; cf. Active circuits; Analog circuits; Equivalent circuits; Intetrated circuit...; Programmable circuits; Rectifiers; Switching circuits
Circuit simulation
analog ccts., symbolic anal. methods and appls., overview. *Gielen, G., + , PROC Feb 94* 287-304
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Circuit stability
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Circuit synthesis
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Circuit topology
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digital opt. cellular image proc. parallel archit. *Kung-Shiuh Huang, + , PROC Nov 94* 1711-1723
Circulatory system; cf. Cardiovascular system
C language
book review; C++ Programming Style (Cargill, T.; 1992). *Chen, J.-C.J., PROC Apr 94* 623
Clutter
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Clutter; cf. Radar clutter
CMOS analog integrated circuits; cf. CMOSFET amplifiers
CMOS digital integrated circuits
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power consumption minimization, cct. optim. *Chandrakasan, A.P., + , PROC Apr 95* 498-523
scaling, low-power design, logic appls., next decade. *Davari, B., + , PROC Apr 95* 595-606
CMOS digital integrated circuits; cf. CMOS memory integrated circuits
CMOSFET amplifiers
cct. techs. for reducing effects of op-amp imperfection. *Enz, C.C., + , PROC Nov 96* 1584-1614
CMOSFET logic devices
Si scaled submicron ultra-low power CMOS technol. *Stork, J.M.C., PROC Apr 95* 607-618
VLSI for digital HDTV. *Mlynek, D.J., + , PROC Jul 95* 1055-1070
CMOS integrated circuits
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low-power RF ICs for portable commun., all-CMOS radio. *Abidi, A.A., PROC Apr 95* 544-569
VLSI archits. for video compression, survey. *Pirsch, P., + , PROC Feb 95* 220-246
CMOS integrated circuits; cf. CMOS digital integrated circuits
CMOS memory integrated circuits
low-power RAM cct. technol. trends. *Itoh, K., + , PROC Apr 95* 524-543
Si scaled submicron ultra-low power CMOS technol. *Stork, J.M.C., PROC Apr 95* 607-618
Codecs
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Code division multiaccess
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corrections to "Emerging applications of multirate signal processing and wavelets in digital communications" (Apr 96 586-603). *Wornell, G.W., PROC Aug 96* 1187-1188
digital commun., multirate sig. proc. and wavelets appls. *Wornell, G.W., PROC Apr 96* 586-603
satellite CDMA transm. for mobile and pers. commun. *De Gaudenzi, R., + , PROC Jan 96* 18-39
SS technol. for commercial appls., review. *Magill, D.T., + , PROC Apr 94* 572-584
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Code division multiplexing
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Codes; cf. Block codes; Encoding; Entropy codes; Variable rate codes
Coding/decoding; cf. Codecs; Decoding; Encoding
Cognitive science; cf. Inference mechanisms
Collaborative work
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Color TV; cf. TV
Commerce; cf. Business
Communication; cf. Communication systems; Professional communication
Communication channels
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Communication channels; cf. Fading channels; Multicast channels; Multi-path channels; Time-varying channels
Communication equipment; cf. Codecs; Land mobile radio equipment; Optical communication equipment
Communication satellites; cf. Satellite communication
Communication signaling
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Communication standards
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digital video coding stds., video commun. role. *Schafer, R., + , PROC Jun 95* 907-924
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HDTV digital systs., stds., proc. and coding. *Ninomiya, Y., PROC Jul 95* 1086-1093
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Communication standards; cf. CCITT
Communication switching
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book review; Performance Evaluation of High-Speed Switching Fabrics and Networks (Robertazzi, T.G., Ed.; 1993). *Li, C.-S., PROC May 94* 824-825
Communication switching; cf. Burst switching; Packet switching
Communication system control; cf. Traffic control (communication)
Communication system economics
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Communication system interfaces
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Communication system nonlinearities
long-dist. lightwave telecomms., opt. fiber amps. *Giles, R., + , PROC Jun 96* 870-883
Communication system operations and management
book review; Telecommunications Network Management into the 21st Century (Aidarous, S., and Plevyak, T., Eds.; 1994). *Min, P.S., PROC Dec 94* 1931
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Communication system performance
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book review; Performance Evaluation of High-Speed Switching Fabrics and Networks (Robertazzi, T.G., Ed.; 1993). *Li, C.-S., PROC May 94* 824-825
cellular networks, radio link traffic engng. *Everitt, D.E., PROC Sep 94* 1371-1382
GSM radio subsystem, perform. aspects. *Fuhrmann, W.F., + , PROC Sep 94* 1449-1466
microcellular systs., hierarchical macrocell overlays. *Rappaport, S.S., + , PROC Sep 94* 1383-1397
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Communication system performance; cf. Computer network performance
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Communication systems
book review; Communication Systems Engineering (Proakis, and Salehi; 1994). *Milstein, L.B., PROC Mar 95* 486
book review; Cyclostationarity in Communication and Signal Processing (Gardner, W.A., Ed.; 1994). *Cochran, D., PROC Oct 94* 1584-1585
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John R. Stone, career/contribs. *Brittain, J.E., PROC Oct 96* 1573-1574
Communication systems; cf. Broadband communication; Business communication; CCITT; Computer networks; Data communication; Digital communication; Image communication; Military communication; Mobile communication; Multiaccess communication; Multimedia communication; Radio communication; Speech communication; Teleconferencing; Telephony; Videophone systems
Communication system software
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Communication system traffic
ATM network traffic mgt. by neural net. *Habib, I.W., PROC Oct 96* 1430-1441
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GSM radio subsystem, perform. aspects. *Fuhrmann, W.F., + , PROC Sep 94* 1449-1466
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multiple access in wireless digital networks. *Abramson, N., PROC Sep 94* 1360-1370
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Communication system traffic; cf. Traffic control (communication)
Commutated circuits
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Ada9X, real-time schedulability-analyzable mechanisms. *Stoyenko, A.D., + , PROC Jan 94* 95-107
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PAC learning fn. approx., feedforward sigmoidal nets. *Rao, N.S.V., + , PROC Oct 96* 1562-1569
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Component reliability
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Computer aided design; cf. Design automation software; Design automation
Computer animation; cf. Animation
Computer applications; cf. Biomedical computing; Microcomputer applications; Military computing; Neural network applications
Computer architecture
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Computer arithmetic; cf. Digital arithmetic
Computer buses; cf. Data buses
Computer communication; cf. Computer networks; Data communication
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Computer engineering education; cf. Computer science education
Computer fault tolerance
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safety-crit. real-time computer systs., archit. aspects. *Lala, J.H., + , PROC Jan 94* 25-40
Computer graphics
correction to "Wavelets in computer graphics" (Apr 96 615-625). *Schroder, P., PROC Aug 96* 1188
wavelets in computer graphics. *Schroder, P., PROC Apr 96* 615-625
Computer graphics; cf. Graphical user interfaces; Virtual reality; Visualization
Computer graphics languages; cf. Visual languages
Computer instructions
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Computer interfaces; cf. Graphical user interfaces; User interfaces
Computer languages
book review; Using Formal Description Techniques - An Introduction to ESTELLE, LOTOS, and SDL (Turner, K.J., Ed.; 1993). *Tsai, T.-C., PROC Nov 94* 1763-1764
Computer languages; cf. Ada; C language; Visual languages
Computer network performance
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wireless data commun. systs. *Pahlavan, K., + , PROC Sep 94* 1398-1430
Computer networks
all-opt. formatted photonic packet switches archit. *Blumenthal, D.J., + , PROC Nov 94* 1650-1667
book review; Fundamentals of Telecommunication Networks (Saadawi, T.N., et al.; 1994). *Robertazzi, T., PROC Aug 95* 1197-1198
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Computer networks; cf. Local area networks
Computer operating systems; cf. Operating systems
Computer performance
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Computer pipeline processing; cf. Pipeline processing
Computer programming; cf. Computer languages; Logic programming; Software design/development
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Computers
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Computer science education
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Concurrent engineering
book review; Concurrent Engineering Design (Miller, L.G.; 1994). *Harper, A., PROC Mar 95* 485-486
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Conducting bodies
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Consumer electronics
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consumer electronics (special issue). *PROC Apr 94* 455-622
consumer electronics, technol. directions. *Griffis, P.D., + , PROC Apr 94* 459-464
special issue of Proceedings of IEEE. *Kressel, H., + , PROC Apr 94* 455-458
Consumer products
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Consumer products; cf. Home appliances
Contacts; cf. Ohmic contacts
Content addressable memories; cf. Associative memories
Control engineering
book review; Process Control Engineering (Rao, M., and Qui, H.; 1993). *Zhou, M.C., PROC Nov 95* 1592-1593
Control engineering education
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Control systems
book review; Robust Control: Systems with Uncertain Physical Parameters (Ackermann, J., et al.; 1993). *Mansour, M., PROC Oct 96* 1572
book review; The Principles of Self-Support in Control Systems (Novakovic, Z.R.; 1992). *Toumodge, S., PROC Apr 95* 696-697
control, learning, and integrat. in knowledge-directed vision. *Draper, B.A., + , PROC Nov 96* 1625-1637
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Control systems; cf. Adaptive control; Aircraft control; Biological control systems; Digital control; Industrial control; Intelligent control; Learning control systems; Linear systems; Motor drives; Nonlinear systems; Optimal control; Pointing systems; Power system control; Predictive control; Servosystems; Stability
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Copyright protection
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Correlation
book review; Engineering Applications of Correlation and Spectral Analysis (Bendat, J.S., and Piersol, A.G.; 1993). *Chen, T.-H., PROC Jan 95* 124
random no. sets, probab. theory, engng. models. *Johnson, G.E., PROC Feb 94* 270-285
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Corrosion testing
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Cosine transforms
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Couplers; cf. Directional couplers; Optical couplers
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Cryogenic electronics
MM-wave SIS receivers characts. for radiotelescopes. *Payne, J.M., + , PROC May 94* 811-823
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Cryptography
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digital TV broadcasting, cryptology. *Macq, B.M., + , PROC Jun 95* 944-957
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quantum inform. proc. for cryptography, computation, and teleportation. *Spiller, T.P., PROC Dec 96* 1719-1746
Current
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Current control
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CW radar
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D

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Data buses
book review; SBus: Information, Applications, and Experience (Lyle, J.D.; 1992). *Zalevsky, J., PROC Apr 95* 694
mesh-connected opt. multiple-access bus interconnects. *Yao Li, + , PROC Nov 94* 1690-1700
optoelectronic buses for high-perform. computing. *Chiarulli, D.M., + , PROC Nov 94* 1701-1710
Data communication
book review; Data Communications Principles (Gitlin, R.O., et al.; 1992). *Kurzweil, J., PROC Apr 94* 623-624
book review; Fundamentals of Telecommunication Networks (Saadawi, T.N., et al.; 1994). *Robertazzi, T., PROC Aug 95* 1197-1198
quantum inform. proc. for cryptography, computation, and teleportation. *Spiller, T.P., PROC Dec 96* 1719-1746
sens. modality technols. for multimedia commun. *Flanagan, J.L., PROC Apr 94* 590-603
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Data communication; cf. Computer networks; Data buses; Land mobile radio data communication
Data compression
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arith. coding, table lookup. *Howard, P.G., + , PROC Jun 94* 857-865
comparative review, real/complex Fourier-related transforms. *Ersoy, O.K., PROC Mar 94* 429-447
data compression (special section). *PROC Jun 94* 856-954
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+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

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HDTV Grand Alliance syst. *Petajan, E., PROC Jul 95* 1094-1105
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Data compression; cf. Quantization; Source coding

Data flow computing
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Data structures
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DC-AC power conversion
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external defibrillators/emergency external pacemakers. *Charbonnier, F.M., PROC Mar 96* 487-499
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Delay effects
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Delay effects; cf. Multipath channels

Delay filters; cf. Linear phase filters

Demodulation; cf. Modulation/demodulation

Design automation
book review; How to Design a Single Phase Motor on a Personal Computer, 4th edn. (Veinott, C.). *Salon, S., PROC Mar 95* 485
book review; The Wiley Project Engineer's Desk Reference (Heisler, S.I.; 1994). *Schoch, K.F., Jr., PROC Mar 95* 485
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Design methodology
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data mgt., CAD frameworks. *van den Hamer, P., + , PROC Jan 96* 42-56
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Detectors; cf. Photodetectors; UHF detectors

DFT; cf. Discrete Fourier transforms

Diagnosis; cf. Fault diagnosis; Medical diagnosis

Dielectric bodies
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Differential equations
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power syst. voltage stabil. anal., local bifurcation theory-based. *Kwatny, H.G., + , PROC Nov 95* 1456-1483

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Digital arithmetic
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Digital communication
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coded orthogonal FDM, TV broadcasting appl. *Le Floch, B., + , PROC Jun 95* 982-996
digital television, part 2: hardware and applications (special issue). *PROC Jul 95* 1007-1105
digital television, part 1: enabling technologies (special issue). *996, + , PROC Jun 95* 831
digital video coding stds., video commun. role. *Schafer, R., + , PROC Jun 95* 907-924
HDTV digital systs., stds., proc. and coding. *Ninomiya, Y., PROC Jul 95* 1086-1093
HDTV Grand Alliance syst. *Petajan, E., PROC Jul 95* 1094-1105
TV broadcasting, cryptology. *Macq, B.M., + , PROC Jun 95* 944-957
TV, motion estim. techs., review. *Dufaux, F., + , PROC Jun 95* 858-876
TV perspectives. *Netravali, A., + , PROC Jun 95* 834-842
TV, review. *Anastassiou, D., PROC Apr 94* 510-519
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Digital communication; cf. Digital modulation/demodulation; Digital radio; Integrated services digital networks

Digital control
book review; Computer Systems for Automation and Control (Olsson, G., and Piani, G.; 1992). *Toumodge, S., PROC Jun 94* 956-957
book review; Transputers in Real-Time Control (Irvin, G.W., and Fleming, P.J., Eds.; 1992). *Toumodge, S., PROC Jul 94* 1096
motor drives, motion control, μP/digital ICs. *Hoang Le-Huy, PROC Aug 94* 1140-1163

Digital filters
book review; Handbook for Digital Signal Processing (Mitra, S.K., and Kaiser, J.F., Eds.; 1993). *Shenoi, B.A., PROC Aug 95* 1199-1200

Digital filters; cf. Multidimensional digital filters
Digital image processing; cf. Image processing
Digital integrated circuits
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Digital integrated circuits; cf. Bipolar digital integrated circuits; Mos digital integrated circuits
Digital modulation/demodulation
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Digital modulation/demodulation; cf. Phase shift keying
Digital radio
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multirate sig. proc. and wavelets appl. *Wornell, G.W., PROC Apr 96* 586-603
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SS technol. for commercial appls., review. *Magill, D.T., + , PROC Apr 94* 572-584
Digital radio; cf. Personal communication networks; Spread spectrum communication
Digital recording
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Digital transmission; cf. Digital communication
Diode lasers; cf. Semiconductor lasers
Direction-finding; cf. Navigation
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Discrete Fourier transforms
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Discrete transforms
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Disk recording; cf. CD recording
Display human factors
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Distance measurement; cf. Optical distance measurement
Distortion; cf. Delay effects; Jitter; Multipath channels
Distributed computing
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distributed interactive simulation (special issue). *PROC Aug 95* 1111-1195
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DRAM chips
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Dynamics
book review; Optimization and Dynamical Systems (Helmke, U., and Moore, J.; 1994). *Faybusovich, L., PROC Jun 96* 907-908
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Ears; cf. Auditory system
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book review; The World in 2020 (McRae, H.; 1994). *Dorf, R.C., PROC Jan 96* 88-89
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Electromagnetic analysis
book review; Computational Methods for Electromagnetics and Microwaves (Booton, R.C.; 1992). *Kuchta, D.M., PROC Jan 95* 123-124
book review; Dyadic Green Functions in Electromagnetic Theory (Tai, C.-T.; 1994). *Eleftheriades, G., PROC Jun 95* 998-999
Electromagnetic diffraction
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Electromagnetic radiative interference; cf. Land mobile radio interference; Radio spectrum management; TV interference
Electromagnetic refraction; cf. Optical refraction
Electromagnetic scattering; cf. Radar scattering; Sea surface electromagnetic scattering
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book review; The Collected Papers of Claude E. Shannon (Sloane, N.J.A., and Wyner, A.D., Eds.; 1993). *Ephremides, A., PROC Oct 96* 1570-1571
Charles Stewart Ballantine, career and contribs. *Brittain, J.E., PROC Jul 94* 1098
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Raymond A. Heising, contribs. *Brittain, J.E., PROC Jun 95* 1003
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book review; The Collected Papers of Claude E. Shannon (Sloane, N.J.A., and Wyner, A.D., Eds.; 1993). *Ephremides, A., PROC Oct 96* 1570-1571
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Integrated circuit manufacture; cf. Integrated circuit fabrication
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Integrated circuit reliability
book review; Hot-Carrier Reliability of MOS VLSI Circuits (Leblebici, Y., and Kang, S.-M.; 1993). *Kwark, Y.H., PROC Mar 95* 486-487
CMOS scaling for high perform. and low power, next decade. *Davari, B., + , PROC Apr 95* 595-606
Integrated circuits; cf. Analog integrated circuits; Application specific integrated circuits; Digital integrated circuits; FET integrated circuits; Integrated optoelectronics; Large-scale integration; Microprocessors; Monolithic integrated circuits
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subMM nonlin wave propag. devices in ultrafast optoelectronics. *Rodwell, M.J.W., + , PROC Jul 94* 1037-1059
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book review; Broadband Telecommunications Technology (Lee, B.G., et al.; 1993). *Li, C.-S., PROC Jun 94* 956
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Integrated voice/data communication; cf. Burst switching
Intelligent control
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book review; An Introduction to Intelligent and Autonomous Control (Antsaklis, P.J., and Passino, K.M., Eds.; 1992). *Walker, I.D., PROC Jun 94* 955
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civ. engng. smart structs., distrib. fiber optic technols. *Culshaw, B., + , PROC Jan 96* 78-86
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distributed interactive simul., future technol. challenges. *Reddy, R., + , PROC Aug 95* 1188-1195
distributed interactive simul., networking technol. *Pullen, J.M., + , PROC Aug 95* 1156-1167
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Interconnected systems
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Internat. Consultative Ctte. for Telephone & Telegraph; cf. CCITT
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Internetworking
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K

Kalman filtering
book review; Kalman Filtering: Theory and Practice (Grewal, M.S., and Andrews, A.P.; 1993). *Bass, R.W., PROC Feb 96* 321-324
book review; Stochastic Systems for Engineers: Modelling, Estimation and Control (Borrie, J.A.; 1992). *Toumodge, S., PROC Apr 95* 695
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Knowledge based systems; cf. Expert systems
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LAN; cf. Local area networks
Land mobile radio
book review; Mobile Radio Communication (Steele, R.; 1992). *Ahmadi, H., + , PROC Sep 94* 1468-1469
book review; Narrowband Land-Mobile Radio Networks (Linnartz, J.-P.; 1992). *LaMaire, R.O., PROC Apr 95* 695-696
satellite commun. overview. *Wu, W.W., + , PROC Sep 94* 1431-1448
SS technol. for commercial appls., review. *Magill, D.T., + , PROC Apr 94* 572-584
wireless networks for mobile and personal communications (special issue). *PROC Sep 94* 1331-1466
Land mobile radio cellular systems
book review; The GSM System for Mobile Communications (Mouly, M., and Pautet, M.-B.). *Chia, S., PROC Jun 95* 999-1000
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digital commun., multirate sig. proc. and wavelets appls. *Wornell, G.W., PROC Apr 96* 586-603
satellite CDMA transm. for mobile and pers. commun. *De Gaudenzi, R., + , PROC Jan 96* 18-39
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satellite CDMA transm. for mobile and pers. commun. *De Gaudenzi, R., + , PROC Jan 96* 18-39
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book review; LAN Communications Handbook (Simonds, F.; 1994). *Hayes, D.F., PROC Sep 95* 1296-1297
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book review; Parallel Logic Programming (Takeuchi, A.; 1992). *Mikolajczak, B., PROC Mar 95* 488
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rewritable MiniDisc syst. for audio recording and removable data storage. *Yoshida, T., PROC Oct 94* 1492-1500
Management; cf. Communication system operations and management; Production management; Project management; RD&E management
Manipulators
book review; Parallel Computation Systems for Robotics Algorithms and Architectures (Fijany, A., and Bejczy, A., Eds.; 1992). *Sharf, I., PROC Aug 95* 1196-1197
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Nervous system
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book review; Performance Evaluation of High-Speed Switching Fabrics and Networks (Robertazzi, T.G., Ed.; 1993). *Li, C.-S., PROC May 94* 824-825
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book review; Neural Networks for Optimization and Signal Processing (Cichocki, A., and Unbehauen, R.; 1993). *Swiniarski, R.W., PROC Jul 95* 1106
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book review; Introduction to the Theory of Neural Computation (Hertz, J., et al.; 1991). *Abu-Mostafa, Y.S., PROC May 96* 799
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O_3 in stratos., mm-wave heterodyne spectral determ. *Parrish, A., PROC Dec 94* 1915-1929
remote sensing for environmental research (special issue). *PROC Dec 94* 1771-1929
sea surface obs. by radar, scatt. rel., wind conditions. *Carswell, J.R., + , PROC Dec 94* 1835-1860
topography of land surface, TOPSAT radar mission. *Zebker, H.A., + , PROC Dec 94* 1774-1786
UHF radiometer for Earth surface rem. sens., synthetic aperture. *Le Vine, D.M., + , PROC Dec 94* 1787-1801
windfields, 3D vector wind retrieval, bistatic dual-Doppler radar. *Wurman, J., + , PROC Dec 94* 1861-1872

Repeaters; cf. Optical repeaters

Resonance
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Resonant power conversion
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motion control power electronics, future perspective. *Harashima, F., PROC Aug 94* 1107-1111

Resonant tunneling devices
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Resonators; cf. Laser resonators

Resource management
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Reviews; cf. Book reviews

Road vehicles
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Robots
autonomous robots, adaptive neural control. *Schmajuk, N.A., PROC Oct 96* 1553-1561
book review; An Introduction to Intelligent and Autonomous Control (Antsaklis, P.J., and Passino, K.M., Eds.; 1992). *Walker, I.D., PROC Jun 94* 955
book review; Robotics and Remote Systems for Hazardous Environments (Jamshidi, M., and Eicker, P., Eds.; 1993). *Maciejewski, A.A., PROC Feb 95* 336-337
self-organizing map, props., engng. appls. *Kohonen, T., + , PROC Oct 96* 1358-1384

Robots; cf. Manipulators; Mobile robots
Robot vision systems
environ. representation using multiple abstraction levels. *Dudek, G.L., PROC Nov 96* 1684-1704
laser radar imaging sens. for robotic appls. *Carmer, D.C., + , PROC Feb 96* 299-320
recognizing obj. fn. through reasoning about partial shape descriptions and dyn. phys. properties. *Stark, L., + , PROC Nov 96* 1640-1656
signals and systems (special section). *PROC Nov 96* 1579-1580, 1623-1704
Robustness
AC ASD, motion control syst., param. estim./ident. *Ohnishi, K., + , PROC Aug 94* 1253-1265
book review; Robust Control: Systems with Uncertain Physical Parameters (Ackermann, J., et al.; 1993). *Mansour, M., PROC Oct 96* 1572
induction motors, motion control. *Lorenz, R.D., + , PROC Aug 94* 1215-1240
PM AC motors, motion control. *Jahns, T.M., PROC Aug 94* 1241-1252
Roots; cf. Poles and zeros
Rotating machines
motion control power electronics, future perspective. *Harashima, F., PROC Aug 94* 1107-1111
Rotating machines; cf. Generators; Motors
Routing; cf. Communication switching

S

Safety; cf. Protection/safety
Satellite broadcasting
digital TV, review. *Anastassiou, D., PROC Apr 94* 510-519
Satellite communication
book review; Satellite Communication Systems Engineering, 2nd edn. (Pritchard, W.L., et al.; 1993). *Huang, C., PROC Mar 94* 448-449
SS technol. for commercial appls., review. *Magill, D.T., + , PROC Apr 94* 572-584
Satellite mobile communication
CDMA transm. for mobile and pers. commun. *De Gaudenzi, R., + , PROC Jan 96* 18-39
mobile satellite commun. overview. *Wu, W.W., + , PROC Sep 94* 1431-1448
Satellite navigation systems; cf. Global Positioning System
Scattering; cf. Acoustic scattering; Radar scattering
Scene analysis; cf. Image analysis
Scheduling
Ada9X, real-time schedulability-analyzable mechanisms. *Stoyenko, A.D., + , PROC Jan 94* 95-107
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hard RT systs., imprecise computations. *Liu, J.W.S., + , PROC Jan 94* 83-94
Heuristic Scheduling Systems with Applications to Production Systems and Project Management (Morton, T.E., and Pentico, D.W.; 1993). *Bard, J.F., PROC Feb 96* 324-325
real-time computing, review. *Shin, K.G., + , PROC Jan 94* 6-24
real-time systs., assertional reasoning. *Shankar, A.U., PROC Jan 94* 172-183
real-time systs. support, scheduling algms./OS. *Ramamritham, K., + , PROC Jan 94* 55-67
Schottky FETs; cf. MESFETs
Sea measurements
radar rem. sens. of surface, scatt. rel., wind speed. *Carswell, J.R., + , PROC Dec 94* 1835-1860
UHF radiometer for Earth surface rem. sens., synthetic aperture. *Le Vine, D.M., + , PROC Dec 94* 1787-1801
Sea surface electromagnetic scattering
radar rem. sens. of surface, scatt. rel., wind speed. *Carswell, J.R., + , PROC Dec 94* 1835-1860
Security; cf. Access control; Power system security
Self-electrooptic-effect devices
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Self-organizing feature maps
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multi-target pass. tracking, neural net optim. *Shams, S., PROC Oct 96* 1442-1457
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Semiconductor device...; cf. Integrated circuit...
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GaN based devices and technol. *Mohammad, S.N., + , PROC Oct 95* 1306-1355
Semiconductor device modeling
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Semiconductor device packaging
diode lasers for mass market appls., opt. recording/printing. *Carlin, D.B., + , PROC Apr 94* 469-481
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Semiconductor devices; cf. Semiconductor lasers
Semiconductor diodes; cf. Light-emitting diodes; Tunnel diodes
Semiconductor electronics industry; cf. Electronics industry
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Semiconductor switches; cf. MOSFET switches; Power FET switches
Sensitivity; cf. Robustness
Sensors; cf. Detectors
Sequences
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FSM testing, principles and methods, survey. *Lee, D., + , PROC Aug 96* 1090-1123
Sequences; cf. Binary sequences; Image sequence analysis
Sequential logic circuit testing
FSM testing, principles and methods, survey. *Lee, D., + , PROC Aug 96* 1090-1123
Series (math.); cf. Fourier series
Servosystems
PM AC motors, motion control. *Jahns, T.M., PROC Aug 94* 1241-1252
Set theory; cf. Fuzzy sets; Morphological operations
Shape; cf. Image shape analysis
Shape control
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Signal analysis
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Signal analysis; cf. Acoustic signal analysis; Biomedical signal analysis; Radar signal analysis; Spectral analysis
Signal design
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Signal detection
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Signal detection; cf. Adaptive signal detection; Biomedical signal detection; Heterodyning; Nonlinear detection; Radar detection
Signal flow graphs
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Signal generators; cf. Pulse generation
Signal processing
book review; Cyclostationarity in Communication and Signal Processing (Gardner, W.A., Ed.; 1994). *Cochran, D., PROC Oct 94* 1584-1585
book review; Handbook for Digital Signal Processing (Mitra, S.K., and Kaiser, J.F., Eds.; 1993). *Shenoi, B.A., PROC Aug 95* 1199-1200
book review; Linear Systems and Signals (Lathi, B.P.; 1992). *Donahue, K.D., PROC Feb 94* 305
book review; Neural Networks for Optimization and Signal Processing (Cichocki, A., and Unbehauen, R.; 1993). *Swiniarski, R.W., PROC Jul 95* 1106
book review; Neural Networks for Signal Processing (Kosko, B., Ed.; 1992). *Williams, R.J., PROC Oct 95* 1432-1433
comparative review, real/complex Fourier-related transforms. *Ersoy, O.K., PROC Mar 94* 429-447
corrections to "Emerging applications of multirate signal processing and wavelets in digital communications" (Apr 96 586-603). *Wornell, G.W., PROC Aug 96* 1187-1188
dataflow proc. networks. *Lee, E.A., + , PROC May 95* 773-801
digital commun., multirate sig. proc. and wavelets appls. *Wornell, G.W., PROC Apr 96* 586-603

Hartley transform, analytic props. *Millane, R.P., PROC Mar 94* 413-428
HDTV digital systs., stds., proc. and coding. *Ninomiya, Y., PROC Jul 95* 1086-1093
optical information processing, part 2: applications - nonimage signal processing (special issue). *PROC Jun 96* 811-905
random no. sets, probab. theory, engng. models. *Johnson, G.E., PROC Feb 94* 270-285
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Signal processing; cf. Adaptive signal processing; Analog processing circuits; Biomedical signal processing; Decoding; Encoding; Estimation; Filtering; Geophysical signal processing; Image processing; Multidimensional signal processing; Optical signal processing; Radar signal processing; Signal sampling/reconstruction; Speech processing; Video signal processing

Signal quantization; cf. Quantization

Signal representations
acoustic sigs. charact., continuous lin. time-freq. representation. *Guillemain, P., + , PROC Apr 96* 561-585
book review; Visual Representation of Speech Signals (Cooke, M., et al., Eds.; 1993). *Yao, J.-H., PROC Sep 94* 1469
book review; Visual Representations of Speech Signals (Cooke, M., et al., Eds.; 1993). *Kadambe, S., PROC Aug 94* 1324-1325
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Signal representations; cf. Image representations

Signal resolution
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Signal resolution; cf. Image resolution

Signal restoration; cf. Image restoration

Signal sampling/reconstruction
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Signal sampling/reconstruction; cf. Analog-digital conversion; Image reconstruction; Image sampling

Silicon materials/devices
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Silicon-on-insulator technology
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Si scaled submicron ultra-low power CMOS technol. *Stork, J.M.C., PROC Apr 95* 607-618

Simulation
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wavelets in computer graphics. *Schroder, P., PROC Apr 96* 615-625

Simulation; cf. Circuit simulation; Computer graphics; Discrete event simulation; Power system simulation

Simulation software
Defence Department, distributed interactive simul. technol. appl. *Shiflett, J.E., + , PROC Aug 95* 1168-1178
distributed interactive simul. environ. *Hofer, R.C., + , PROC Aug 95* 1124-1137
SIMNET, simulator networking, mil. training. *Miller, D.C., + , PROC Aug 95* 1114-1123

Skin; cf. Tactile system

Sleep
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SLM; cf. Spatial light modulators

Smart sensors; cf. Intelligent sensors

Smart structures; cf. Intelligent structures

Social factors
book review; The World in 2020 (McRae, H.; 1994). *Dorf, R.C., PROC Jan 96* 88-89
book review; World Class (Kanter, R.M.; 1995). *Dorf, R.C., PROC Jul 96* 1050-1051
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Social factors; cf. Technology social factors

Software; cf. Communication system software; Computer languages; Design automation software; Simulation software; System software

Software design/development
book review; C++ Programming Style (Cargill, T.; 1992). *Chen, J.-C.J., PROC Apr 94* 623
Defence Department, distributed interactive simul. technol. appl. *Shiflett, J.E., + , PROC Aug 95* 1168-1178
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Software design/development; cf. Parallel programming; Software requirements and specifications; Software verification and validation

Software development environments
book review; Using Formal Description Techniques - An Introduction to ESTELLE, LOTOS, and SDL (Turner, K.J., Ed.; 1993). *Tsai, T.-C., PROC Nov 94* 1763-1764
design methodology mgt. *Kleinfeldt, S., + , PROC Feb 94* 231-250

Software development management
book review; Software Quality Management - A Pro-active Approach (Brinkworth, J.W.O.; 1992). *Freuhauf, K., PROC Mar 95* 488-489
generalized rate-monotonic scheduling theory, real-time systs. develop. *Lui Sha, + , PROC Jan 94* 68-82

Software engineering
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SIMNET, simulator networking, mil. training. *Miller, D.C., + , PROC Aug 95* 1114-1123

Software engineering; cf. Software design/development

Software fault tolerance
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Software management; cf. Software development management

Software quality
book review; Software Quality Management - A Pro-active Approach (Brinkworth, J.W.O.; 1992). *Freuhauf, K., PROC Mar 95* 488-489

Software quality; cf. Software verification and validation

Software reliability; cf. Software fault tolerance; Software verification and validation

Software requirements and specifications
book review; Using Formal Description Techniques - An Introduction to ESTELLE, LOTOS, and SDL (Turner, K.J., Ed.; 1993). *Tsai, T.-C., PROC Nov 94* 1763-1764
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Software safety
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Software verification and validation
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Sonar scattering
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Sonar signal analysis
sig. anal., time-freq. distribs., sonar and radar echoes appl. *Gaunaurd, G.C., + , PROC Sep 96* 1231-1248

SONET
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+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

Source coding
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book review; Universal Compression and Retrieval (Krichevsky, R.; 1994). *Csiszar, I., PROC Jun 95* 1000-1002
digital audio coding for visual commun. *Noll, P., PROC Jun 95* 925-943
Space; cf. Extraterrestrial measurements
Space vehicle communication
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DSN precision radiometer systs. and microwave calib. *Stelzried, C.T., + , PROC May 94* 776-787
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digital television, part 2: hardware and applications (special issue). *PROC Jul 95* 1007-1105
digital television, part I: enabling technologies (special issue). *996, + , PROC Jun 95* 831
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optical information processing, part 1: image processing and vision (special issue). *PROC May 96* 691-798
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book review; Engineering Applications of Correlation and Spectral Analysis (Bendat, J.S., and Piersol, A.G.; 1993). *Chen, T.-H., PROC Jan 95* 124
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Spectrum management; cf. Radio spectrum management
Speech analysis
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book review; Visual Representation of Speech Signals (Cooke, M., et al., Eds.; 1993). *Yao, J.-H., PROC Sep 94* 1469
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Speech coding
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Speech processing
book review; Voice Processing (Pelton, G.E.; 1993). *Kroon, P., PROC Nov 94* 1763
Speech recognition
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Speech synthesis
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Speed; cf. Velocity control
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digital commun., multirate sig. proc. and wavelets appls. *Wornell, G.W., PROC Apr 96* 586-603
GPS wide area augmentation for aircraft navig. *Enge, P., + , PROC Aug 96* 1063-1088
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SRAM chips
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Stability
book review; Stability Theory (Parks, P.C., and Hahn, V.; 1993). *Elliott, D.L., PROC May 96* 799-800
Stability; cf. Circuit stability; Frequency stability; Laser stability; Lyapunov methods; Power system stability; Robustness
Standardization
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State estimation; cf. Kalman filtering
State space methods
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Statistics
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Stereo vision
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Stimulated emission; cf. Masers
Stochastic processes
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Stochastic processes; cf. Markov processes; Queuing analysis; Time series
Stochastic systems
book review; Stochastic Systems for Engineers: Modelling, Estimation and Control (Borrie, J.A.; 1992). *Toumodge, S., PROC Apr 95* 695
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Submersibles; cf. Underwater vehicles
Submillimeter wave antennas
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Submillimeter wave integrated circuits
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Submillimeter wave lasers
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Submillimeter wave waveguides
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Surface acoustic wave devices
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Surface acoustic wave waveguides
Bragg cell Integrated acoustooptic/magnetooptic modulator devices for opt. inform. proc. *Tsai, C.S., PROC Jun 96* 853-869
Surveillance
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Switched circuits; cf. Commutated circuits
Switches/switchgear; cf. MOSFET switches; Optical switches; Power semiconductor switches
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Synchronization
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Synchronous digital hierarchy
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Synchronous motor drives
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Synchronous optical network; cf. SONET
Synthetic aperture imaging
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System analysis and design
Defence Department, distributed interactive simul. technol. appl. *Shiflett, J.E., + , PROC Aug 95* 1168-1178
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Systems engineering
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System software
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Target recognition; cf. Object recognition; Radar target recognition
Technological innovation
book review; Managing Innovation and Entreprencurship in Technology Based Firms (Martin, M.J.C.; 1994). *Pinto, J.K., PROC Nov 96* 1706-1707
book review; Mastering the Dynamics of Innovation: How Companies Can Seize Opportunities in the Face of Technological Change (Utterback, J.M.; 1994). *O'Neill, R.R., PROC Jun 95* 999
book review; Strategic Technology Management (Betz, F.; 1993). *Gaynor, G.H., PROC Mar 96* 500-501
Technology; cf. Microwave technology
Technology assessment
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Technology social factors
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Technology transfer
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Telecommunication; cf. Communication systems
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Telescopes
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Time-varying channels
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TV
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Uncertain systems
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User interfaces
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book review; Analog VLSI Implementation of Neural Systems (Mead, C., and Ismail, M., Eds.; 1989). *Andreou, A.G., PROC Oct 95* 1430-1431
book review; Hot-Carrier Reliability of MOS VLSI Circuits (Leblebici, Y., and Kang, S.-M.; 1993). *Kwark, Y.H., PROC Mar 95* 486-487
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+ Check author entry for coauthors

† Check author entry for subsequent corrections/comments

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Virtual reality
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radar rem. sens. of sea surface, different wind conditions. *Carswell, J.R., + , PROC Dec 94* 1835-1860
rem. profiling in atmos. studies, overview. *Clifford, S.F., + , PROC Mar 94* 313-355
rem. sens. of vel., coherent lidar systs. *Huffaker, R.M., + , PROC Feb 96* 181-204
Wire communication; cf. Cable TV
Wire communication cables; cf. Twisted pair cables; Underwater communication cables
Word recognition; cf. Speech recognition

X

X-ray tomography
radiologic image compression, review. *Wong, S., + , PROC Feb 95* 194-219
wavelets in biomedical appls. review. *Unser, M., + , PROC Apr 96* 626-638

Z

Zeros; cf. Poles and zeros
Z transforms
comparative review, real/complex Fourier-related transforms. *Ersoy, O.K., PROC Mar 94* 429-447